SAF/AQT-SR-90-015

The USAF STINFO Program Manager Training Course: Workshop Notes

June 1989

United States Air Force
Scientific and Technical Information Program
Management of STINFO

USAF STINFO MANAGEMENT 90/8

Secretary of the Air Force
Deputy for Scientific and Technical Information (SAF/AQT)
The Pentagon
Washington, DC 20330-1000

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

1. AGENCY USE ONLY *(Leave blank)*	2. REPORT DATE	3. REPORT TYPE AND DATES COVERED
	June 1989	

4. TITLE AND SUBTITLE
The USAF STINFO Program Manager Training Course: Workshop Notes.

5. FUNDING NUMBERS

6. AUTHOR(S)
Walter R. Blados
Charlie Maiorana (INFO/tek)

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)
Secretary of the Air Force
Deputy for Scientific and Technical Information
SAF/AQT, Room 4D289, The Pentagon
Washington, DC 20330-1000

8. PERFORMING ORGANIZATION REPORT NUMBER
USAF-STINFO-Management-90/8
SAF/AQT-SR-90-015

9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)

10. SPONSORING/MONITORING AGENCY REPORT NUMBER

11. SUPPLEMENTARY NOTES
United States Air Force Scientific and Technical Information Program, Management of STINFO.

12a. DISTRIBUTION/AVAILABILITY STATEMENT
Approved for public release; distribution unlimited.

12b. DISTRIBUTION CODE

13. ABSTRACT *(Maximum 200 words)*

This course is designed to train new USAF STINFO Program Managers to carry out the duties and responsibilities of that position. The goals of the course are to ensure: (1) Awareness of the complete spectrum of STINFO duties; (2) Sufficient guidance as to how to carry out these duties; (3) Awareness of the complete set of STINFO regulations and policies; (4) Introduction to some of the skills that will help in carrying out the duties. To run a successful local program, the STINFO Program Manager will need to promote the program within their activity to both the management and scientist/engineer levels.

14. SUBJECT TERMS
STINFO, USAF, management, STINFO Program Management, training, policy

15. NUMBER OF PAGES
203

16. PRICE CODE

17. SECURITY CLASSIFICATION OF REPORT	18. SECURITY CLASSIFICATION OF THIS PAGE	19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT
UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED	UL

The USAF STINFO Program Manager

Training Course

Workshop Notes

Prepared by:
Charlie Maiorana
INFO/tek

Notice

This notebook was originally prepared under Air Force contract F4964288P1238 by INFO/tek. It was based on the existing STINFO Officer's Handbook, Air Force Regulations, and other written and oral guidance provided by Mr. Walter Blados, Ms. Jackie Doben, Ms. Belva Williams, Ms. Nancy Allin, and others involved in the Air Force STINFO program. The intended use of this manual is as an internal Air Force training guide for new USAF STINFO Program Managers.

This document was prepared using Microsoft Word on a Macintosh II computer. The charts were prepared using MacDraw, and the cartoons were drawn using a wonderful program called The Comic Strip Factory. The vu-graphs that accompany this workbook were prepared using PowerPoint.

Charlie Maiorana
INFO/tek

Table of Contents

1. Workshop Introduction

1.1. Objective

This course is designed to train new USAF STINFO Program Managers to carry out the duties and responsibilities of that position. In the past, training for this position consisted of on-the-job experience and whatever training could be given at the regular STINFO conferences .

The goals of this workshop are to ensure that you, as a STINFO Program Manager :

1. Are aware of the complete spectrum of STINFO duties.
2. Have sufficient guidance as to how to carry out these duties.
3. Are aware of the complete set of STINFO regulations and policies.
4. Have been introduced to some of the skills that will help in carrying out your duties.

In addition, it is hoped that you will gain an understanding of the policies that are behind the USAF STINFO program, and also an understanding of the functioning of a few of the various organizations and activities that you will come in contact with on a regular basis.

1.2. Technique

After we've finished some short introductory material, we will be covering a large number of topics that are relevant to the STINFO Program Manager's position. For each topic there will be:

1. A listing of the key points associated with that topic.
2. A discussion of the topic.
3. A review of the documentation supporting that topic. (Copies of most of the documentation associated with the STINFO function are included in the Appendix to this notebook.)
4. And, where appropriate, a few problems to test your understanding of the topic and reinforce the material.

1.3. Topics Covered

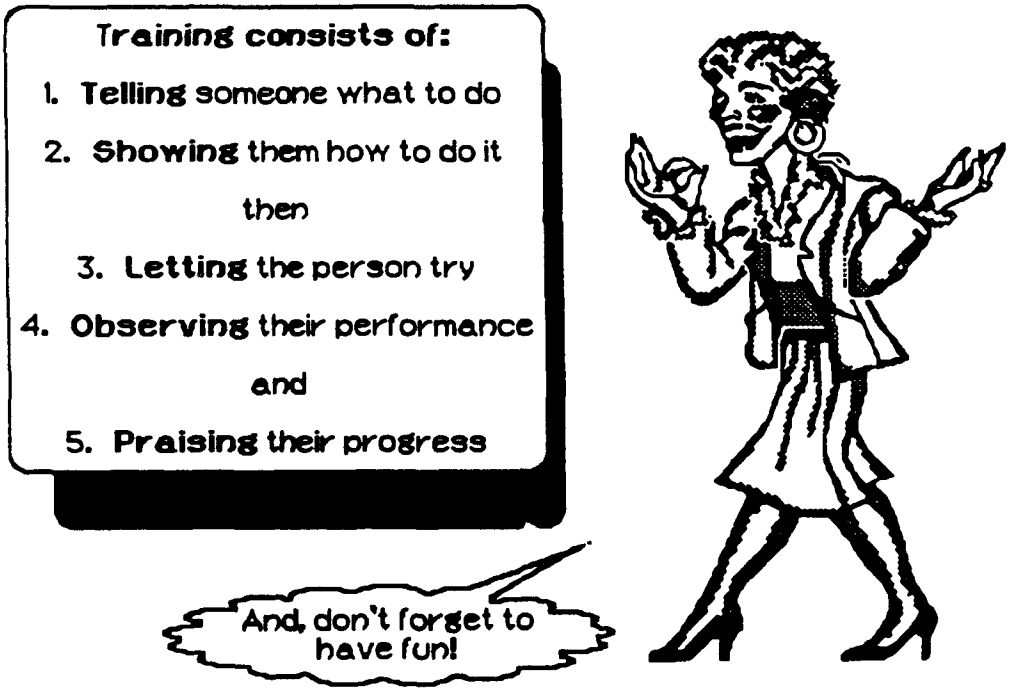
Topic 1:	Workshop Introduction, Regulations, Learning
Topic 2:	Being a Manager
Topic 3:	The DoD Scientific and Technical Information Program
Topic 4:	The USAF STINFO Program
Topic 5:	STINFO Terminology
Topic 6:	STINFO Duties - General
Topic 7:	STINFO Duties - Tracking and Processing STINFO Materials
Topic 8:	STINFO Duties - Work Unit Information System
Topic 9:	STINFO Duties - Technology Transfer
Topic 10:	STINFO Duties - Control and Marking
Topic 11:	STINFO Duties - User Support
Topic 12:	STINFO Duties - Internal
Topic 13:	STINFO Duties - Liaison and Coordination
Topic 14:	Giving a Presentation
Topic 15:	Promoting the STINFO Function
Topic 16:	PC Applications in STINFO
Topic 17:	Wrap-up

As you can see, the bulk of our time will be spent on those topics that you would have expected. However, there are five topics we'll be covering that you might not think of as "mainline" STINFO topics. These are (1) How to Understand Anything, (2) Being a Manager, (3) Giving a Presentation, (4) Promoting the STINFO Function and (5) PC Applications in STINFO.

All five of these topics **are** important to running a successful STINFO program at your activity. As a STINFO Program Manager, your main duty will be to **manage** the STINFO activities of your organization, and although most of the current STINFO positions are "one-deep", a few of you will be put in the position of managing subordinates. For these reasons, the topic of "Being a Manager" will be discussed.

To run a successful local program, the STINFO Program Manager will need to promote the program within their activity to both the management and scientist/engineer levels, and one of the fundamental building blocks of a promotional program are briefings and educational seminars. Done badly, these can easily harm your program; done well, they can lay the foundation for what you are trying to accomplish. For this reason, the topics of "Giving a Presentation" and "Promoting the STINFO Function" are included.

Because your duties will require setting up procedures to track and control information, your effectiveness in doing these tasks will be increased if you are able to use today's computing tools to help you. Hence, an introduction to "PC Applications in STINFO" has been included in the topic list.



1.4. Schedule

Day 1

Topic 1: Workshop Introduction - 1/2 hour

Topic 2: Being a Manager - 1 hour

Topic 3: The DoD Scientific and Technical Information Program - 1/2 hour

Topic 4: The USAF STINFO Program - 1 hour

Topic 5: STINFO Terminology - 1 hour

Topic 6: STINFO Duties - General - 2 hours

Topic 7: STINFO Duties - Tracking and Processing STINFO Materials - 2 hours

Day 2

Topic 8: STINFO Duties - Work Unit Information System - 1 hour

Topic 9: STINFO Duties - Technology Transfer - 1 hour

Topic 10: STINFO Duties - Control and Marking - 3 hours

Topic 11: STINFO Duties - User Support - 2 hours

Topic 12: STINFO Duties - Internal - 1 hours

Day 3

Topic 13: STINFO Duties - Liaison and Coordination - 2 hours

Topic 14: Giving a Presentation - 1 hour

Topic 15: Promoting the STINFO Function - 1 hour

Topic 16: PC Applications in STINFO - 3 hours

Topic 17: Wrap-up - 1 hour

1.5. DoD and Air Force Regulations

Fundamental to this course are a number of DoD and Air Force directives, instructions, regulations, and pamphlets that specify responsibilities, what is to be done, and sometimes even how it is to be done. Before starting, it is important is be aware of the numbering system that is used and how to locate the various documents.

The DoD issues a large number of directives and instructions. These documents are numbered according to the following 7 major subject groups:

1000 - Manpower, Personnel, and Reserve
2000 - International Programs
3000 - Planning and Readiness
4000 - Logistics and Resources Management
5000 - General Administration
6000 - Health and Medical
7000 - Comptrollership

Within each of these categories there is a first and second level breakdown. For example, under the General Administration group, the first level breakdown consists of:

5000 - 5099 General
5100 - 5299 Organization and Function
5200 - 5299 Security
5300 - 5399 Office and Administrative Services
5400 - 5499 Public Information
5500 - 5599 Legal and Administrative

Finally, within the Security category, the second level breakdown is:

5200 - General
5210 - Administrative Security
5220 - Industrial Security
5230 - Control of Information
5240 - Counterintelligence

Thus we know that DoD 5200.12 (which is a directive you'll be hearing about in this course and is titled "Policy on the Conduct of Meetings Involving Access to Classified Information") is a General Administrative directive dealing with Security matters.

Associated with some of the DoD directives are a variety of manuals, regulations, handbooks, and pamphlets. These are identified by the directive number followed by a symbol such as R, M, PH, etc., followed sometimes by a sequence number. For example, DoD 5230.25-PH is a pamphlet associated with DoD directive 5230.25.

The fundamental listing of all DoD directives and instructions is contained in the ***DoD Directives System Annual Index(DoD 5025.1I)***, which is available on a subscription basis and is published by the Directives Division, Washington Headquarters Services, Pentagon, Washington, D.C. 20301-1155. This document lists the titles of all current documents by number and subject, and lists the Action Officer responsible for that directive and their telephone number.

DoD directives requiring direct implementing action with the Department of the Air Force are implemented by a correspondingly large number of Air Force regulations. Often the DoD directives are included as enclosures to the Air Force regulations.

The Air Force regulations, manuals, and pamphlets are organized into "series," where a series corresponds (roughly) to a single topic. For example, the 80 series contains the documents relating to Research and Development topics. and the 190 series contains the documents relating to Public Affairs topics. Most of the Air Force regulations that will be referred to in this course (and which specify your responsibilities) are currently in the 80 series, but starting with 83-1, those regulations of primary interest to the STINFO program will be numbered in the 83 series.

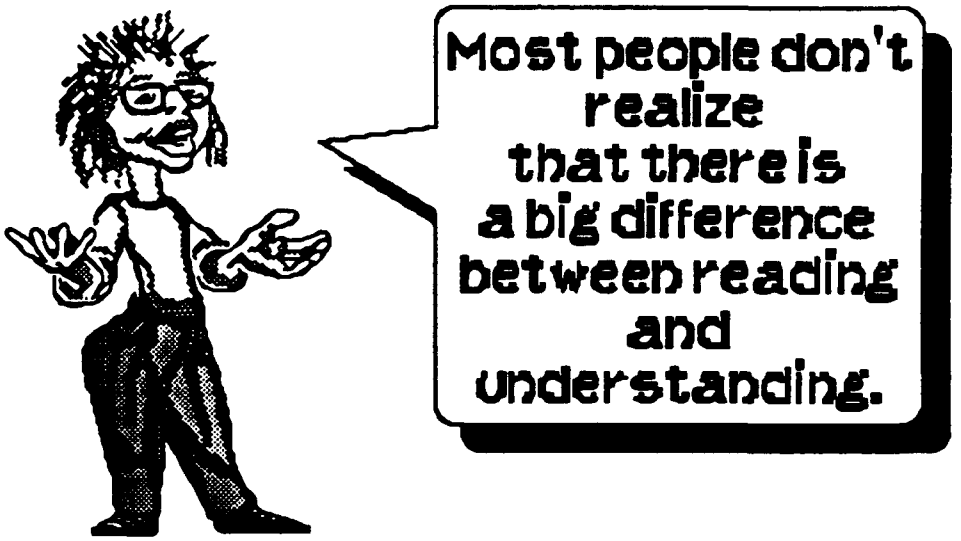
The fundamental listing of all Air Force regulations, manuals, and pamphlets is ***AFR 0-2, Numerical Index of Standard and Recurring Air Force Publications***. This regulation, which is updated quarterly, lists the document number, date issued, title, Office of Primary Responsibility (OPR), number of pages, and distribution type for all Air Force regulations, manuals, and pamphlets.

USAF and Command publishing bulletins are used to keep up with revisions, additions, and changes to directives between updates of the quarterly index. These publishing bulletins document official **forms** also.

Because of the importance of DoD directives and Air Force regulations to the STINFO Program Manager, it goes without saying that you should be familiar with both of the above publications. In addition, you should either (1) know where to get your hands on the current issues of either when needed, or (2) obtain both in your office on a regular basis.

1.6. How to Understand Anything

Since the STINFO function centers around information, and since the common information media (despite the microcomputer age) is still paper, it is appropriate to start out with a review of how to gain an **understanding** of the contents of a document, as opposed to **reading** it. The technique described below, which is commonly taught to undergraduates in college, is a "universal." It can be used effectively to understand just about anything.



The technique which I am going to describe is known by many names. When I was taught it in college, it was known as "**patterning**" so this it the name that is used here. You might have also heard of it called "**visual outlining.**" Patterning is a simple and powerful technique that allows you to see the "big picture" and hopefully gain understanding from this insight.

To apply it, you just need a sheet of paper, a pencil, and a little thought. What you attempt to do is draw a diagram or picture of the document that shows the main components and ideas, and the relationships between each of these elements. After the diagram has been drawn, you can stand back and examine the relationship pattern, change relationships, and add new nodes until the diagram is a true graphical representation of the concept.

You start a pattern by placing your central idea, theme, or research topic in a circle in the center of the paper. Then you list the second level of related ideas in circles around the central node, connecting each of these

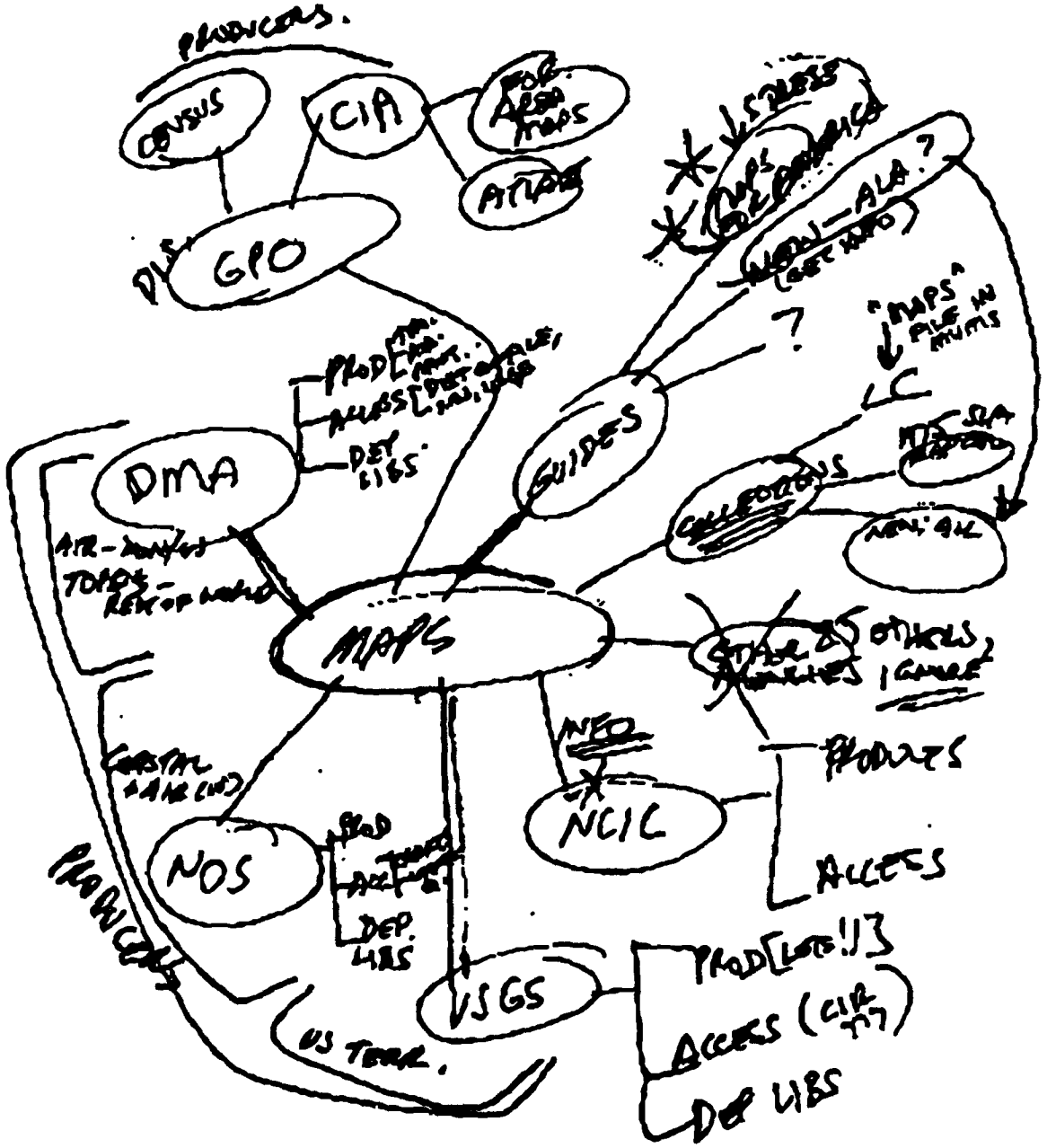
with arrows to the central node. Around each of these nodes you add more and more nodes and connections until the entire concept has been drawn.

Another rule of patterning is that the entire diagram must fit on one sheet of paper. You gain understanding by examining the diagram and the implied relationships, so page-flipping is definitely out. However, there is no limit on the size of paper. I have seen this technique used to lay out a entire college course. The resulting pattern took up an entire large wall of taped-together sheets of wrapping paper.

In addition to aiding in your understanding of any document or topic, patterning is also a powerful writing and presentation tool. Before attempting to write or present anything, try and draw a pattern of the topic. Once the pattern has been drawn, simply walk around the terminal nodes, jotting down your thoughts on each, and relating each back to the central idea through any connecting nodes. You'll find that when you've finished traversing the network, you'll have also completed a rough draft of your ideas.

Patterning has been presented here because you will be asked during this course to draw patterns for a number of things, from a graphical representation of a regulation, to a pattern for the STINFO Program Manager's job.

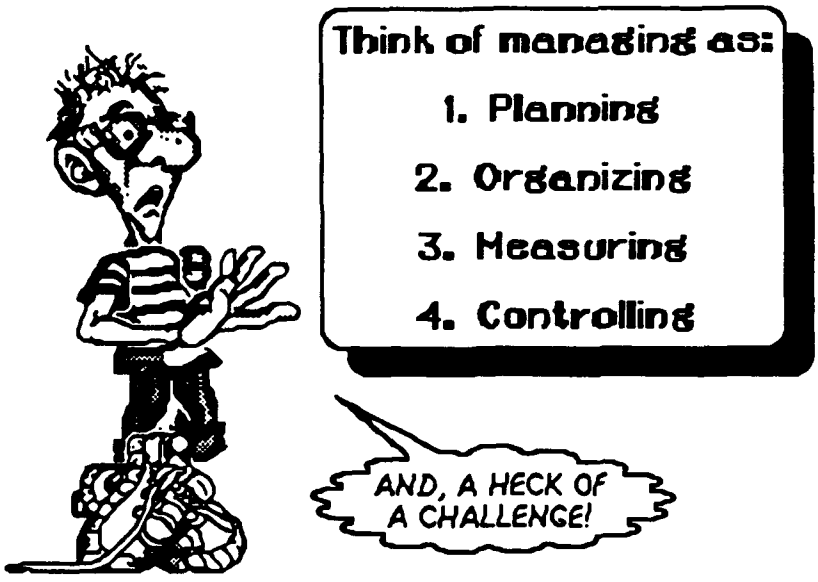
If you would like to learn more about patterning, I recommend reading ***Writing the Natural Way: Using Right-Brain Techniques to Release Your Expressive Powers*** by Gabriele Lusser Rico, 1983, St. Martins Press.



A Sample Patterning Example.

(This real example was an attempt to understand cartographic information sources.)

2. Being a Manager



2.1. Key Points

- The STINFO Officer's job is a management position.
- The STINFO Program Manager should be familiar with the basic management functions and the tools used to carry out these functions.
- The basic management functions are:
  - Planning
  - Organizing
  - Measuring
  - Controlling
- The basic management tools and techniques are:
  - Goal Setting/Performance Measurement
  - Delegating/Accountability
  - Time Management

2.2. What is a "Manager"

Some of you might have the misconception that a manager is someone who directs subordinates in order to achieve results. Given the reality that almost all STINFO Program Managers are "one-deep" in their position, and that many of you will have additional duties, the thought of learning how to manage subordinates might seem ludicrous! **I agree with you! However, there is a lot more to being an effective manager than just applied behavior science when dealing with subordinates.** It is these aspects of being a manager that will be discussed here.

We probably would all agree that a manager is **responsible** for producing results, just like everyone else. However, it is the approach which a manager takes to producing those results that is different from the approach taken by the non-manager.

IF YOU ARE NOT READY TO ACCEPT FULL PERSONAL ACCOUNTABILITY AND RESPONSIBILITY FOR HOW A JOB IS DONE, YOU ARE NOT READY TO BE A MANAGER.

Non-managers usually produce results by doing all the work themselves. They do not plan or set goals, do not set out procedures for doing recurring work, do not establish working liaison relationships with others, do not hold themselves personally accountable for the quality of work produced, are hard pressed when asked for any performance measurements for their job, and constantly get caught up in the "activity trap" where simply doing busywork gets substituted for doing the right job.

On the other hand, a manager produces results by establishing and monitoring procedures, by coordinating their efforts with others, by influencing others, and (of course) by participating in carrying out the duties set out in their own procedures.

It is easy to tell if you are currently a manager. The four basic management functions are (1) planning, (2) organizing, (3) measuring, and (4) controlling. If you are really a manager, you should be spending a percentage of each day working at these functions. If you are spending all of your time processing forms and chasing down documents, you are **not** a manager.

In order to help push you (hopefully not kicking and screaming) into accepting the management role **which a STINFO manager must accept**, I have attempted to summarize some of the most important points about each management function, and to outline some of the fundamental techniques that are used in each.

Planning

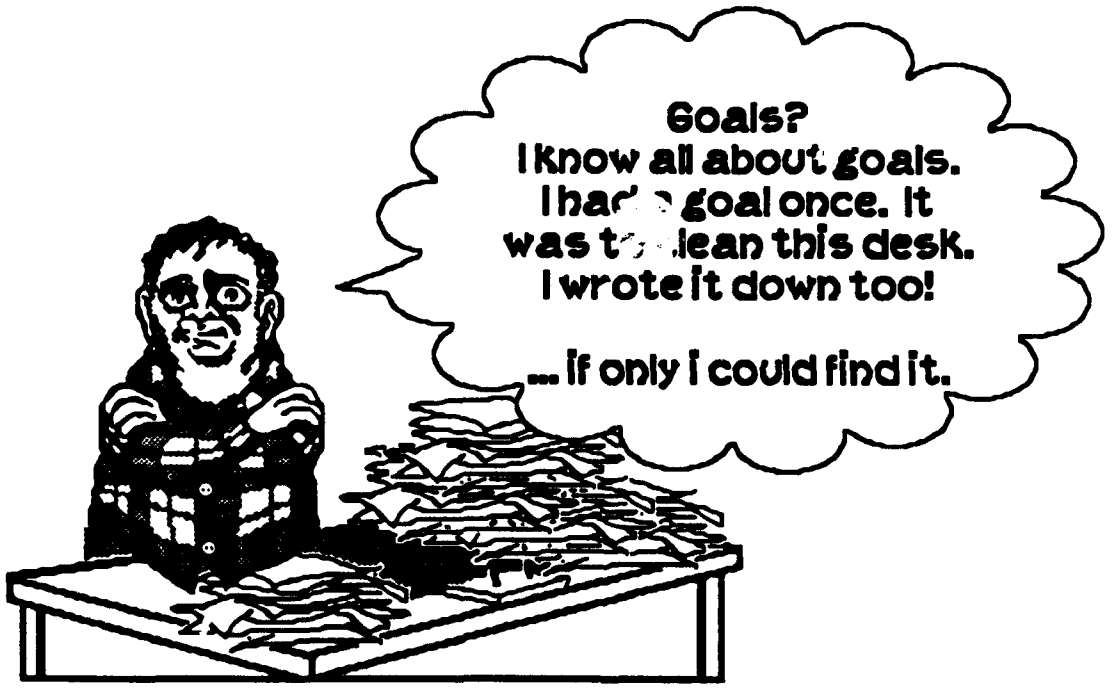
The "cornerstone" management function is planning. Planning what? Planning whatever needs to be done, whether how to promote your function, how to implement a procedure, or whatever your goals or the needs of your job are.

The key is the word "goals." If you do not know what your goals are, or cannot visualize (and verbalize) the difference between the current situation and what you want it to be, don't bother planning.

Before any planning can take place, you must have already established clear, achievable, measurable, and understandable goals. Planning is simply laying out the steps necessary to reach those goals.

Backing up a step then, I'd like to start by discussing goal setting, and then we'll get back to discussing the planning function.

Goal Setting



Goal setting is not easy and is not something that most people in work environments should be doing alone without some input from their supervisors.

In order to set work-related goals, you must have a clear understanding of what is expected of you. In the case of the STINFO function, the fundamental guidance is the set of governing regulations, such as AFR 80-40, which derive from the STINFO Program Management. (The main topic of this course, remember?)

The acid test of whether you understand what is expected of you is to be able to write down the set of goals for your position in your own words. Until you can do this, the goals are neither clearly stated nor understandable enough to be classified as "goals".

Being able to write **clear** and **understandable** goals is only the first step. Then next step in goal setting is to determine whether the goals are achievable. The most common reasons that goals are not achieved are (1) they were too wide-ranging or vague to start with, (2) the goal was physically not achievable, (3) the person lacked the training to reach the goal, or (4) the person did not **believe** that they could reach the goal.

GOALS SHOULD BE:

1. **CLEAR**
2. **UNDERSTANDABLE**
3. **ACHIEVABLE**
4. **MEASURABLE**

If you think a valid goal is "to be a successful STINFO manager", you are be commended for the thought, but get a C- on goal setting. In order to be achievable, goals must be stated in small enough chunks to be digested easily. Also, stating a goal without some reference to time is self-defeating. The goal will get done exactly when you planned when it would - **never**. An

example of a achievable goal would be "to set up a internal document tracking system over the next 3 months, to follow each information deliverable from it's appearance on a work unit through being entered into DTIC."

Another thing to consider is whether the goals you set for yourself are physically **achievable**. For example, if your goal is "to make sure every technical report that is published by your organization is processed through STINFO the same day it is received," you have probably set up a physically impossible goal for yourself. However, a similar goal restated as "to, over the next six months, cut down the average STINFO processing time from two months to one month" might turn out to be very achievable.

Goals should, to every extent possible, be **measurable**. Measurable goals are exactly what the words say: goals you can put a number to and even graph in order to see how you are doing. Almost every goal can be stated in some measurable way. (Yes, there are some exceptions, but the goals that are measurable will almost always be the first ones reached.) In the previous example, the goal of cutting down the document processing time was clearly a measurable goal.

If you lack the training required to reach your goals, and you ignore this fact, you won't reach them either. If you have a goal and don't have the skills to reach it, either get the training you need, or find someone else to do those aspects of the job that are beyond your skills. (Remember that part of the job of a manager is to solve problems and suggest solutions.) An example would be the goal of having a microcomputer-based document tracking system. (Yes, every STINFO manager should have one.) Despite the hype that we have all been subjected to by the microcomputer industry, not everyone has the computer skills to implement even a simple tracking system. If you are in this situation, recognize where you need help and get it.

The last impediment to reaching goals is tied directly to self-esteem. Many people simply **do not believe** that they can reach certain goals. These are also the people who never believe that they've been trained adequately for whatever situation they are in. No one can make you believe in yourself and your talents (no matter how many Joe Girard or Norman Vincent Peale books you read.) The only advice I want to give you here is the same advice which I give myself. **Reach for goals just beyond what you think you are capable of.** You don't really know your limits until you test them, and I'd rather fail going for the shiny apple just beyond my reach than succeed and grab the wormy apple at my fingertips.

Planning (Again)

So, the secret to planning is **setting goals**. The next step is easy, simply list (1) the steps necessary to reach those goals, (2) the estimated time required to accomplish each of these steps, and (3) the sequence in which you must do them. The key is being able to visualize the complete

process going from step to step, and to be able to visualize the situation before and after each step.

PLANNING IS NOTHING BUT LAYING OUT THE STEPS REQUIRED TO REACH GOALS.

Organizing

The second fundamental management function is organizing. Organizing what? Again, anything that needs organizing, starting with your own time.

The STINFO position will give you all the opportunities you need to test your organizing skills. Mainly, there will be procedures to set up (and improve) to help carry out many of the STINFO duties. To put it bluntly, without organized procedures, you haven't got a chance!

The two aspects of organizing that I will be discussing are (1) personal time management, and (2) organizing a procedure.

Personal Time Management

The STINFO manager position will, if you are conscientious and responsive to the full array of responsibilities, tax your personal time management skills to the limit. If you haven't realized it yet, there's a lot to do in this job! Personal time management is basically an effectiveness multiplier. If you are not willing to organize your time, I cannot imagine you reaching any reasonable goals concerning this program.

The key to personal time management is not which system to use, but to **use a system, any system**! As long the system has you list your daily, weekly, and longer term goals, and allows you to track your progress in

meeting these goals, the system you use is good. The time required to set out and revise these goals is some of the most important time you will spend during the day.

It's fun to compare the systems that people use. Ask the people around you what system they use. People who have tried a few different systems and have homed in on a particular system that works for them feel an almost religious zeal about that system.

After trying and discarding a couple of commercial notebook-style "planning organizer" systems, two microcomputer-based systems, and a couple of priority-based systems, I have returned to the system I was using 10 years ago. The system that I am currently using is based on "yea olde" clipboard and some forms I run through my copier. I use three levels of goals and three forms: ***daily***, for the next day's activities; ***weekly***, which lists the goals for the current week and the following week; and ***yearly***.

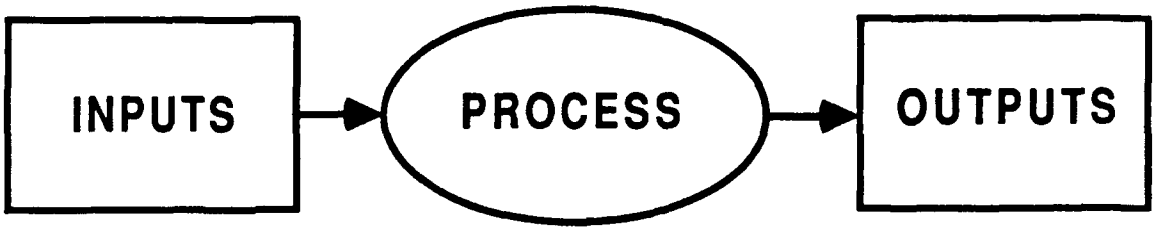
I usually fill out my daily goals form at the end of the previous day. When it is being filled out, I glance at my weekly goals, think about pressing matters, and list the calls I need to make the following day. I no longer prioritize my daily tasks, and simply cross out the task when it is complete.

My weekly goals form (which covers the next two weeks) is filled out each Sunday. On it I list my goals for the current and next week. Finally, at the end of each year, I try to set up a goals list for the coming year. On this sheet I list both my financial and work accomplishment goals. I transfer some of the major annual goals to my wall calendar, and tack a copy of these goals to the wall in front of my desk.

Organizing a Procedure

Most of the organizing that you will do in your job will involve setting up procedures so that recurring duties are carried out efficiently. The steps to successfully setting up a procedure to carry out a requirement (and meet one of your goals) are:

1. List the inputs to the procedure and everything you know about these inputs.
2. List the outputs from the procedure and everything you know about them.
3. List the processing steps that get you from the inputs to the outputs.
4. Formalize these steps into a procedure, creating whatever intermediate forms, checks, summaries that are necessary to control and monitor the procedure.
5. Give it a try and improve the rough spots.



IF YOU DO IT ONCE, IT'S AN ACTIVITY.

IF YOU FORMALIZE IT SO THAT EACH TIME IT'S DONE THE SAME, IT'S A PROCEDURE

Measuring

Whether you are interested in achieving goals or improving personal performance, the "key to the ranch" is being able to measure tangible results and compare these results against an existing situation and a projection. (What fun would it be to diet if you didn't have (1) a current weight, (2) a desired weight, or (3) a scale?)

Many people are distainful of performance measuring and refer to those involved as "bean counters." (Yes, if it is done in a simplistic fashion with no thought as to its purpose, or if misused, performance measuring can be construed as a kind of "bean counting.") Yet, if you do not record either your progress towards a goal or the statistics associated with a procedure, you are left with no way to tell if the goals are being reached.

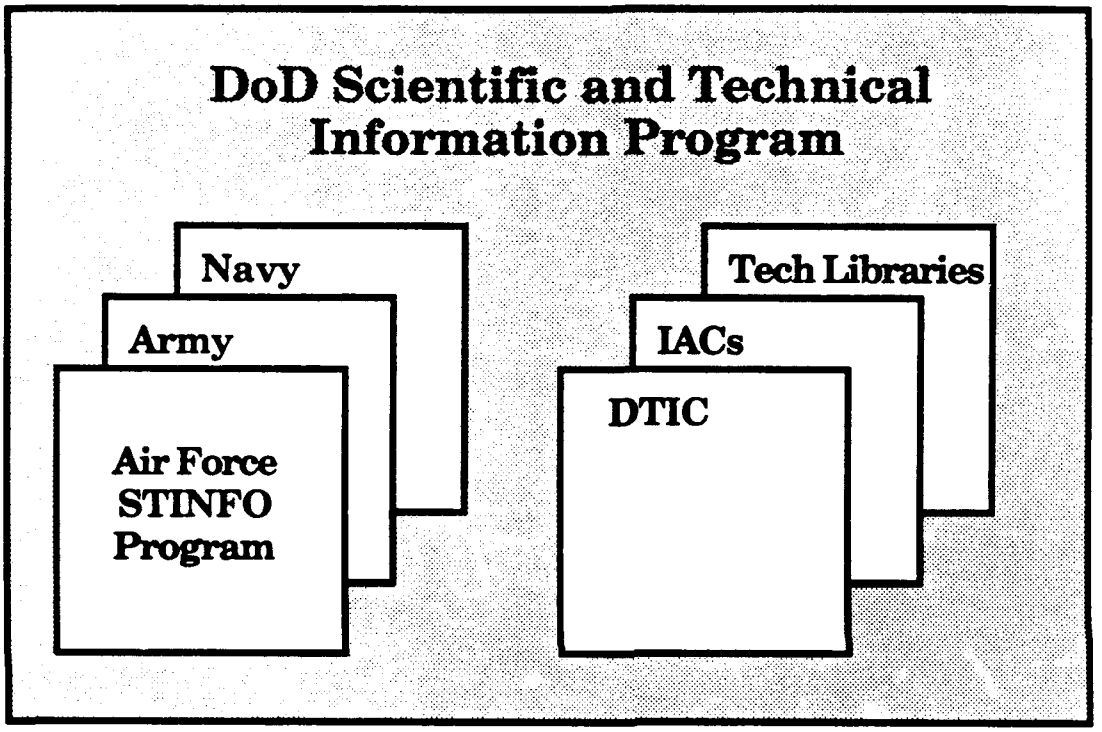
Basically, for every procedure you develop, you should include either an ongoing (such as a performance chart) or periodic (such as a regular summary page) performance measure.

Controlling

The final management function of the "big four" is **controlling**. If you have taken a management approach to your job, set up procedures to handle all recurring work, and established performance measures to determine if the procedures are working, then controlling your situation should be a snap.

The key to controlling your situation is being able to monitor the on-going status of your various procedures. Again, there is simply no way you can do this without performance measures that reflect the status of each.

3. The DoD Scientific and Technical Information Program



3.1. Key Points

- The DoD STIP is the information "umbrella" under which all other military information programs, including the USAF STINFO program, operate.
- The concepts and responsibilities of the DoD STIP are outlined in DoD Directive 3200.12.
- In addition, the functional responsibilities of both the Deputy Assistant Secretary of Defense for Research and Engineering and the Heads of DoD Components are specified in the enclosures to DoD Directive 3200.12.
- Because the USAF STINFO program exists in support of the DoD STIP, the goals of the DoD STIP are the goals of the STINFO program. As such, a knowledge of these goals should help in understanding why many aspects of the STINFO Officer's duties are being carried out.

3.2. Objective and Responsibilities

The overall objective of the DoD STIP is to increase the effectiveness of the technical effort in the DoD community. The primary goals of the STIP are to ensure that DoD scientific and technical information:

1. Provides maximum contribution to the advancement of science and technology.

2. Permits timely, effective, and efficient management of DoD research, engineering and studies program.

3. Eliminates unnecessary duplication of effort and resources.

The responsibilities for carrying out the DoD STIP are divided between (1) the Under Secretary of Defense for Research and Engineering and OSD Staff - having supervision, coordination, and review functions,and (2) the Heads of DoD components - having specific functional responsibilities.

Of these two sets of responsibilities, clearly the second set are of the greatest interest because many of the STINFO Program Manager's duties are in support of these responsibilities.

There are 10 specific responsibilities listed for the Heads of DoD Components. Six of these responsibilities are very relevant to the STINFO program and, as you will see shortly, are part your duties. These responsibilities (paraphrased slightly) include to:

1. Maintain a current review and inventory of STI functions and activities under their administrative control.

2. Encourage the sponsorship and participation in technical symposia and meetings as a mechanism for STI transfer and exchange.

3. Execute technology transfer programs and assign single points of contact to coordinate their technology transfer programs.

4. Ensure that all significant scientific or technical results derived from DoD work or contracts are recorded as technical documents. Procedures shall ensure that copies of these documents are available to DTIC, technical libraries, IACs, and the technical community within established security and limitation controls.

5. Operate and support activities for the input of data to DoD databases of bibliographic and R&E program-related

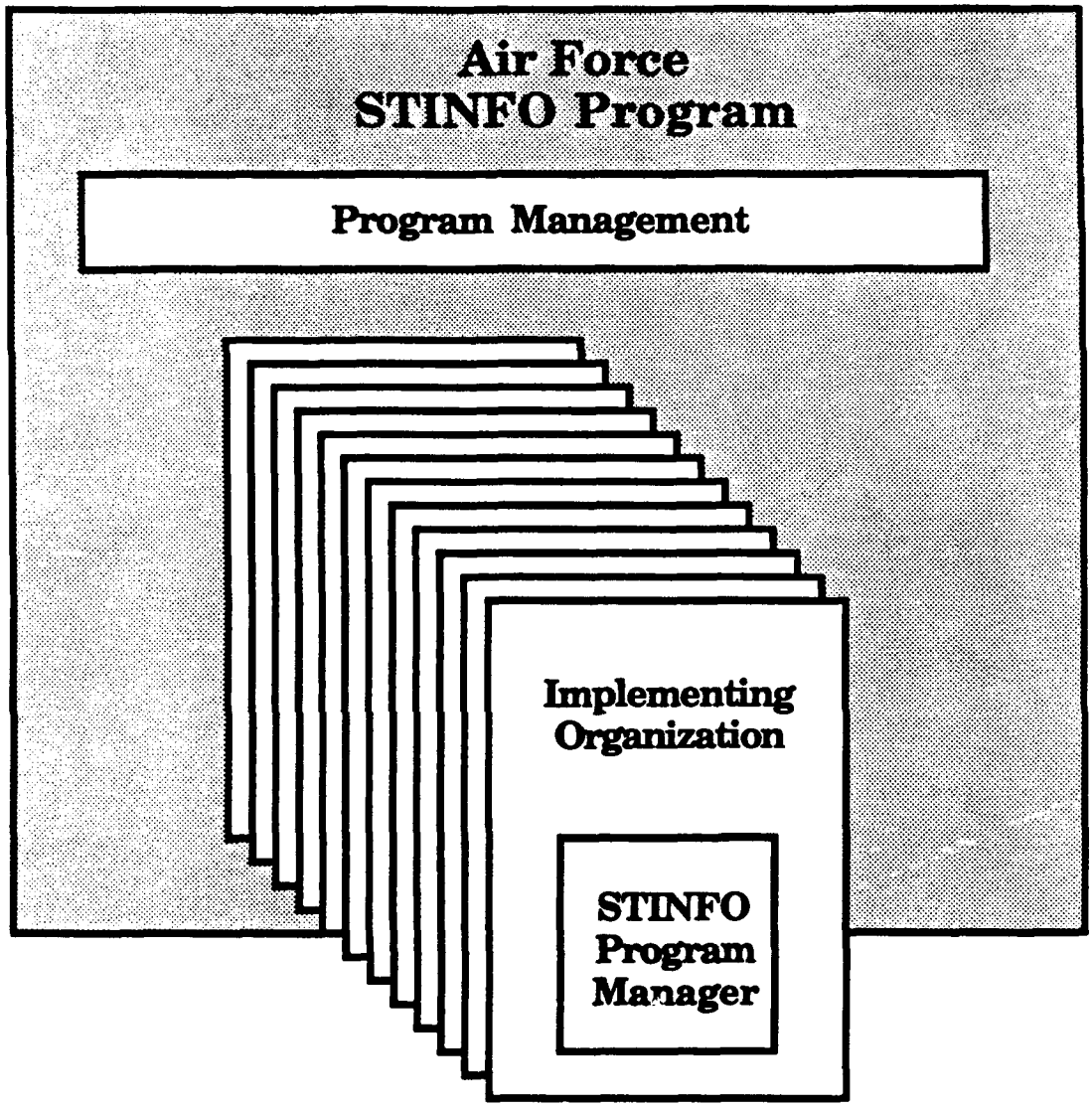
information, and be responsible for the accuracy and currency of database content and reporting.

6. Within security and distribution limitations, policies, and guidelines, ensure that STI is provided for public use in an unclassified manner to the maximum extent possible.

3.3. Documentation

The only documentation in support of the DoD STIP to be aware of is DoD Directive 3200.12, ***DoD Scientific and Technical Information Program***, a copy of which is included in the Appendix to these notes.

4. The USAF STINFO Program



4.1. Key Points

- The USAF STINFO program is an implementation of DoD Directive 3200.12.
- The governing regulation for the USAF STINFO program is AF Reg 83-1.

- AF Reg 83-1 contains:
  - A description of the USAF STINFO program.
  - Participation requirements for the program.
  - List of the Program Management duties and responsibilities.
  - List of the Implementing Organization responsibilities.
  - List of the STINFO Program Manager duties.

4.2. Discussion

4.2.1. Introduction

The USAF STINFO program is an integral part of the DoD STIP, implementing the Air Force's duties and responsibilities as laid out by DoD Directive 3200.12. AF Reg 83-1 is intended as an overall guide to the program, its concept, participation, and responsibilities at the three levels of (1) Program Management, (2) Implementing Organization, and (3) STINFO Program Manager within an activity.

This section summarizes the information in AF Reg 83-1 up through the STINFO Program Manager's duties (which is one of the main topics of the rest of this course.)

4.2.2. Objectives and Goals

The overall objective of the USAF STINFO program is to ensure that all STINFO generated under Air Force RDT&E programs makes the maximum impact on DoD and national R&D efforts. To carry out this objective, the program provides for the interchange of scientific and technical information within and among Air Force organizations, DoD components, federal agencies, government contractors, and the national and international scientific and technical community.

The specific goals of the program are to:

1. Improve mission effectiveness.
2. Improve the scope and effectiveness of collecting, producing, disseminating, and applying scientific and technical information. The overriding priority is to ensure that all scientific and technical data concerning Air Force research, engineering, and production efforts are reviewed for controlled dissemination, and are rapidly and effectively exchanged

within the research, development, and engineering communities throughout the DoD and industry.

3. Support the information needs of managers, scientists, engineers, and technicians.

4. Increase productivity and effectiveness of research and engineering programs.

5. Improve our military capabilities through research and application of new technologies.

6. Maximize use of R&D resources.

7. Facilitate domestic technology transfer.

4.2.3. Participation in the USAF STINFO program

Participation in the USAF STINFO program is Air Force wide, and is required by the following organizations (which include all the major commands):

1. Air Force Systems Command
2. Air Force Space Command
3. Air Force Logistics Command
4. Electronic Security Command
5. Air Training Command
6. Air University
7. Air Force Academy
8. Military Airlift Command
9. Strategic Air Command
10. Tactical Air Command
11. Air Force Communication Command
12. Air Force Operational Test and Evaluation Center
13. Air Force Technical Applications Center

Each of these organizations is required to establish a primary STINFO office, and as necessary within the organization, other STINFO offices. For example, at the Air Force Systems Command, STINFO offices exist at all divisions, centers, and laboratories.

4.2.4. STINFO Program Management Responsibilities

SAF/AQT is the office of primary responsibility (OPR) for the USAF STINFO program management. The official responsibilities of that office are listed in AF Reg 83-1, and the following paraphrased and annotated list is taken from that source. The duties of this office are to:

1. Issue and maintain USAF STINFO regulations. *A primary duty of the SAF/AQT is to continually review and update the regs associated with the USAF STINFO program. Of note is that these regs will appear in the 83 series instead of the current 80 series.*

2. Coordinate the USAF STINFO program with the Contractor Data Management program, the Foreign Disclosure Office, the Freedom of Information Office, the Public Affairs program, the Technical Intelligence program, Air Force Library program, and pertinent portions of command and control programs. *Essentially, to coordinate the USAF STINFO program with all related information handling organizations.*

3. Make planning and technical requirements information available through the Air Force Information for Industry Offices. *To support the AFIFIOs and ensure that they receive any STINFO that relates to planning and technical requirements.*

4. Make technical information on selected technologies available through Information Analysis Centers. *To support the IACs and ensure that they receive any STINFO that relates to the IACs area of interest.*

5. Review STINFO needs continually, and, as appropriate, revise existing programs. *Plan for future needs, relationships with other programs, new types of STINFO, and make sure that the STINFO program changes to accommodate these as they occur.*

6. Establish an active technology transfer program. *To support the Domestic Technology Transfer Program.*

7. Set up procedures for the release of production and engineering information to potential contractors. *To support the Potential Contractor Program.*

8. Manage the Work Unit Information System. *To ensure that the Air Force is both inputting current and complete information into the WUIS, and taking full advantage of the WUIS when planning new efforts.*

4.2.5. Implementing Organization Responsibilities

Each commander of an Implementing Organization has specific responsibilities under AF Reg 83-1. Basically, these responsibilities are to assign a STINFO Program Manager, keep SAF/AQT appraised of who holds this position, and then give the STINFO Program Manager the support necessary to carry out their job.

The listing of duties for the Implementing Organization and for the STINFO Program Manager are somewhat redundant. What this means is that the responsibility for these duties rests on two sets of shoulders: the STINFO Program Manager and the organization itself.

The list below is a paraphrased list of these duties:

1. Assign a STINFO Program Manager as a primary duty assignment and notify SAF/AQT of any changes.
2. Ensure that all STINFO is properly reviewed and marked.
3. Ensure that all STINFO produced by the organization are recorded as technical documents and prepared, distributed, and security marked correctly and without undue delay.
4. Support the input of data into the DTIC databases.
5. Sponsor technical meetings, and encourage scientists and engineers to attend professional meetings, make personal visits, and write journal articles.
6. Establish an Office of Research and Technology Applications (ORTA) in support of the domestic technology transfer program.
7. Establish and maintain technical libraries.
8. Review the STINFO program and provide operational support including programming, funding, accounting, and reporting for those services maintained by the STINFO office.

4.2.6. AFMAG

In January of 1986, an Air Force Management Analysis Group (AFMAG) was formed to examine the problem of the exploitation of unclassified Western electronic databases containing scientific and technical information. In addition, it was to determine the extent of accessibility to these databases and recommend appropriate action to stem flow of sensitive unclassified technical information.

In June of 1986, the AFMAG prepared a final report which revealed that there has been a substantial transfer and drain of U.S. technology, and that this drain has made a significant contribution to the military potential of countries not aligned to the U.S. The recommendations were given to HQ USAF/RD to implement.

There are 27 specific recommendations included in the AFMAG report, 6 of which of which have a direct bearing on the STINFO program. One specific recommendation (which has already occurred) was to change the office of primary responsibility for the STINFO program to SAF/AQT. This change should be instrumental in giving the STINFO program higher visibility and more leverage within the AF.

The complete text of the AFMAG recommendations are too lengthy and inappropriate to reproduce here, but they are recommended reading for STINFO Program Managers. The following are the extracted title statements of those recommendations that are directly concerned with the STINFO program:

1. Transfer STINFO function to HQ USAF.
   Evaluate relationship between STINFO/Foreign Disclosure.

2. Functional Management Inspection of USAF STINFO Program - Management, Policy, Manning.

3. Issue a TIG Special Interest Item (SII) to MAJCOM IGs requiring inspection of their STINFO programs.

4. Develop education and training programs for STINFO managers, Public Affairs Officers, Technical Librarians, originators of STINFO, and others involved in STINFO functions.

   a. A formal education program to institutionalize STINFO in professional military education courses, program management courses, contract management courses, etc.

   b. Develop and administer an education and training awareness program directed to all producers and users of STINFO. Given at key locations for all personal involved in STINFO; emphasis on how to identify, mark, and distribute unclassified STINFO.

5. Consolidate Air Force regulations pertaining to scientific and technical information under a new publication series to ensure they are not limited only to the research and development arena. (Amplify marking of data; discuss responsibilities of "support" personnel; punitive non-compliance.)

6. Reduce and simplify the Militarily Critical Technologies List, and prepare a User's Guide which presumes knowledge in the technical subject area of interest, but aids a reviewer in distinguishing between those aspects or characteristics of a technological area which are considered militarily critical and those which are not.

7. Develop standard clauses for Air Force contracts which may produce unclassified scientific and technical information to:

   a. Bind contractors to submit unclassified STINFO generated under contract for AF review and approval prior to dissemination to the public.

   b. Require contractors ensure employees who prepare, review and approve STINFO sign a statement that they understand the significance of, and consequences and penalties for, mishandling that information.

   c. Restrict access by foreign students or employees to militarily critical S&T research and development efforts.

8. Initiate procedures within the STINFO and PA channels to provide substantive and timely feedback to originators of the reason their documents are not cleared for release to the public.

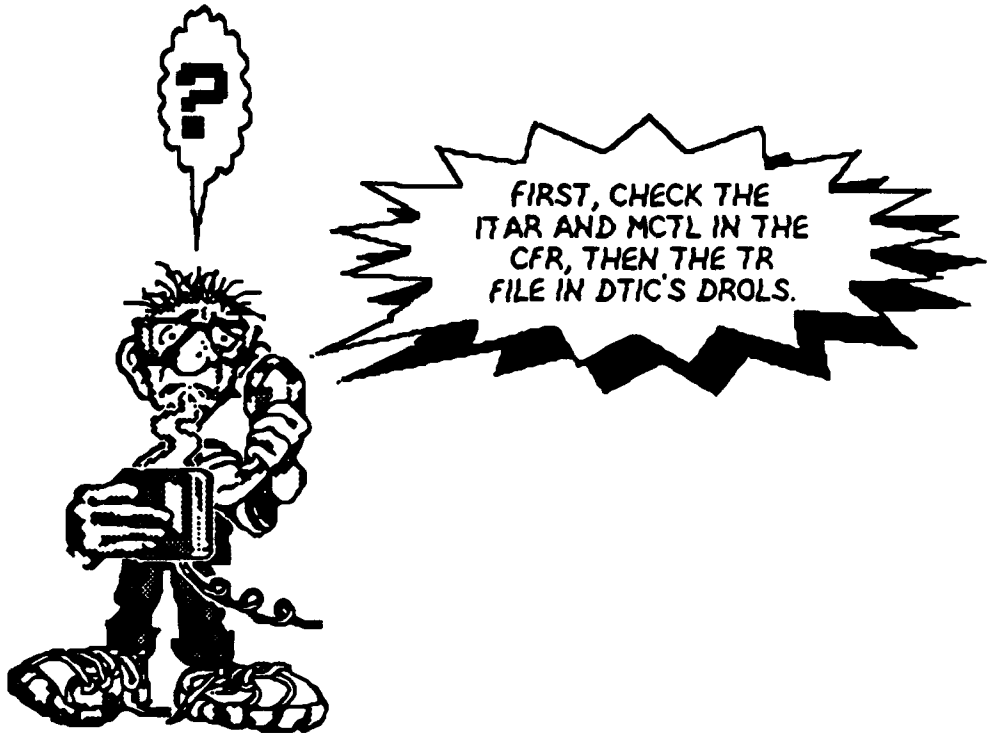
4.3. Documentation

The primary documentation for this section is AF Reg 83-1, ***USAF Scientific and Technical Information Program***, a copy of which is included in the Appendix to these notes. Further information on the AFMAG and its recommendations can be obtained from the STINFO Program Management Office.

5. STINFO Terminology: Definitions and Abbreviations

Part of any job is learning the vocabulary of that position. Fortunately, in the world of STINFO, there is a fairly small specialized vocabulary and set of acronyms to learn. The list given below was drawn from the set of source materials that were used in the writing of this set of notes. In addition, almost every regulation, directive, or presentation that you will come in contact with will use (or add to) this list.

The purpose of this section is to introduce this set of terms to you, and to check your understanding of them. (Oh-oh, I think that the word "check" might mean quiz.)



Abstract - A brief factual summary of the most significant information contained in a document.

AD Number - The number assigned to documents by DTIC. This is the number used when ordering documents from DTIC or NTIS. (The letters AD originally meant "ASTIA Document", for the post-WW II

committee set up to advise and organize scientific and technical information.)

AECA - see **Arms Export Control Act**

AFIFIO - see **Air Force Information for Industry Office**

AFMAG - see **Air Force Management Analysis Group**

AFPCP - see **Air Force Potential Contractor Program**

Air Force Information for Industry Office (AFIFIO) - Offices providing access to USAF R&D planning materials and other related documents to registered contractors.

Air Force Management Analysis Group (AFMAG) - An Air Force study group formed to examine specific problem areas. One such AFMAG was formed in January, 1986, to examine the problem of the exploitation of unclassified Western databases. A number of recommendations, many of which directly affect the STINFO program, were included in their report.

Air Force Potential Contractor Program (PCP, AFPCP) - A program, administered by the AFIFIOs, that registers and sponsors access to DTIC and other planning information to individuals and companies with the potential to become defense contractors.

Arms Export Control Act (AECA) - The law set out in 22 U.S.C. 2751-2794. This requires obtaining a license from the Department of State for exporting defense articles and services, including technical data related to weapons. It is implemented by the ITAR.

CCL - see **Commodity Control List**

CDRL - see **Contract Data Requirements List**

Center for the Utilization of Federal Technology (CUFT) - A part of the NTIS organization involved with domestic technology transfer.

Central Information and Control System (CIRC II) - The national system for the processing, storing, retrieval, and dissemination of foreign scientific and technical written word intelligence information. In addition to supporting the service intelligence agencies, it supports all Government-sponsored R&D agencies.

Certified Contractor Access List - A list of those contractors eligible to receive export-controlled information.

CFR - see ***Code of Federal Regulations***

CIRC II - see **Central Information Reference and Control System**

COCOM - see **Coordinating Committee**

***Code of Federal Regulations* (CFR)** - The annual codification of the general and permanent rules published in the *Federal Register*. The *Code* is divided into 50 titles that represent broad areas subject to Federal regulation. The *Code* is kept up to date by the individual issues of the *Federal Register*. Basically, the CFR contains the complete set of regulations of each government agency.

Commodity Control List (CCL) - A detailed listing prepared by the Department of Commerce to control the export of goods and technologies to specific countries.

Contract Data Requirements List (CDRL) - A list of the documentation requirements of a contract. It is attached to the Statement of Work in purchase request packages for proposed contracts. The CDRL is DD Form 1423.

Controlled Information - Information that is restricted in its dissemination: by security regulations; for proprietary, ethical, privileged, or certain administrative reasons; against unauthorized disclosure of certain official information; or for reasons requiring special access controls prescribed by other existing Air Force regulations and DoD directives or instructions.

Controlling DoD Office - DoD activity responsible for distribution of document whether work was done in-house, under contract, or under a grant.

Coordinating Committee (COCOM) - An international organization that cooperates in controlling the export of strategic goods and technologies.

Country Group - A grouping of the world's countries into seven groups for convenience in applying the export control laws.

Coupling - The process of actively communicating the results of research and development efforts directly or indirectly to appropriate users.

Critical Technology - Technologies that consist of (a) arrays of design and manufacturing know-how (including technical data); (b) keystone manufacturing, inspection, and test equipment; (c) keystone materials; (d) goods accompanied by sophisticated operation, application, or maintenance know-how that would make a significant contribution to the military potential of any country or combination of countries and that may prove detrimental to the security of the U.S. Also called militarily critical technology.

CUFT - see Center for the Utilization of Federal Technology

Data Item Description (DID) - The collection of DD Form 1664s that are included in a contract to specific the form of the deliverables.

Data Management Officer (DMO) - Person responsible for the contents and format of the CDRL.

Data Management Program - the Air Force program for managing data acquired from industry under the terms of Air Force contracts.

Defense RDT&E Online System (DROLS) - The basic collection of online databases (including the technical reports, IR&D, and work unit summary databases) and search language vended by DTIC.

Defense Technical Information Center (DTIC) - Clearinghouse for the DoD collection of research and development in virtually all fields of science and technology.

DID - see **Data Item Description**

Distribution Statement - A statement used in marking a technical document to denote the conditions of its availability for distribution, release, or disclosure.

DMO - see **Data Management Officer**

Document - Any recorded information regardless of its medium, physical form or characteristics. A document can be written or printed material, magnetic tapes or disks, laser disks, maps, charts, photographs, negatives, films, videotapes, or any other media used for recording information.

DoD - Department of Defense

DRIT - see ***DTIC Retrieval and Indexing Terminology***

DTIC - see **Defense Technical Information Center**

DTIC Retrieval and Indexing Terminology (DRIT) - Publication listing DTIC's controlled Posting Term vocabulary. This publication should be consulted whenever subject terms are being assigned to a technical publication in field 18 of DD Form 1473.

EAA - see **Export Administration Act**

EAR - see **Export Administration Regulations**

Export Administration Act (EAA) - Any of the laws which have been codified at 50 U.S.C. Appendix 2401-2420. These laws are the basis for the Export Administration Regulations.

Export Administration Regulations (EAR) - The set of regulations controlling the export of various materials and data to other countries. These regulations are administered by the Department of Commerce and contain the Commodity Control List (CCL).

Export Control Laws - Any law which bars exports from the U.S., or requires obtaining a license to make such exports.

FAS - Functional Address Symbol

FDPO - see **Foreign Disclosure Policy Office**

Federal Register - Issued each Federal working day, the *Federal Register* provides a uniform system for publishing Presidential documents, regulatory documents, proposed rules, and required notices.

FOIA - see **Freedom of Information Act**

Foreign Disclosure - Sharing classified military information with a foreign national or foreign government.

Foreign Disclosure Policy Office (FDPO) - The organization within the Air Force responsible for implementing foreign disclosure policies and arranging for the release of classified materials to foreign nationals and foreign governments.

Freedom of Information Act (FOIA) - The legal authority under which the general public is allowed to review, inspect, and receive copies of Air Force records (with some exceptions.) The FOIA is codified at 5 U.S.C. 522, and regulated by AFR 12-30.

Government Printing Office (GPO) - The printing and document distribution arm of the federal government. The GPO sells to the public many of the materials it prints, including a number of Air Force Manuals and other documents (other than technical reports.)

Government-Industry Data Exchange Program (GIDEP) - A government-wide information program concerning with engineering type data such as testing reports and safety alerts.

GPO - see **Government Printing Office**

IAC - see **Information Analysis Center**

Independent Research & Development (IR&D) - Research and development that is primarily sponsored by the contractor but partially funded by the DoD because it has the potential for DoD use.

Information Analysis Center (IAC)- A specially approved organization which provides information services in selected, highly specialized subject areas. A large number of IACs exist, but only about 20 are sponsored by the DoD.

International Traffic In Arms Regulations (ITAR) - A Federal regulation prohibiting the export of technical data relating to defense items without the approval of the Department of State.

IR&D - see **Independent Research & Development**

ITAR - see **International Traffic In Arms Regulations**

KWIC - (Key Word in Context) A alphabetic listing of keywords such as are found in titles, etc. so that the words on both sides of the keyword are also shown.

Material Inspection and Receiving Report (DD Form 250) - Document used to certify that all contract requirements have been completed.

MCTL - see **Militarily Critical Technology List**

Militarily Critical Technology List (MCTL)- The list issued by DoD under authority of the EAA of 1979. The MCTL lists technologies not possessed by countries to which exports are controlled, and which, if exported, would permit a significant advance in a military system of any such country.

National Technical Information Service (NTIS) - Central source for the public sale of U.S. government-sponsored research, development, and engineering reports, as well as for foreign technical reports and other analyses prepared by national and local government agencies and their contractors.

NTIS - see **National Technical Information Service**

Office of Primary Responsibility - The office responsible for carrying out a specific function.

OPR - see **Office of Primary Responsibility**

PA - see **Public Affairs Office**

PCP - see **Air Force Potential Contractor Program**

PEDS - see **Program Element Descriptive Summary**

Primary Distribution List - List of addressees who receive reports on initial distribution.

Public Affairs Office (PA, PAO) - Office primarily responsible for security and policy review of all information, including scientific and technical information, that is to be released to the public.

RDT&E - see **Research, Development, Test, and Evaluation**

Report Documentation Page (New SF 250, old DD Form 1473) - Form containing all the abstracting and indexing information required for documents deposited into DTIC.

Research - All efforts directed toward increased knowledge of natural phenomena and environment, and efforts directed toward the

solution of long term defense problems in physical, engineering, life, behavioral, and social sciences.

Research, Development, Test, and Evaluation (RDT&E) Activity - Any activity sponsoring or performing a function or mission in direct support of DoD RDT&E programs.

SBIR - see **Small Business Innovation Research Program**

Scientific and Technical Information (STINFO) - Information which relates to research, development, engineering, test, evaluation, production, use, and maintenance of military equipment, supplies, and munitions.

Scientific and Technical Information Activities - All management, administrative, and operational efforts directed to the planning, support, control, performance, and improvement of the processing, handling, and communication of S&T information.

Scientific and Technical Information Program (STIP) - The DoD coordinated structure for the handling of scientific and technical information. The concepts and responsibilities of this program are detailed in DoD Directive 3200.12.

Secondary Distribution - Any distribution of a scientific or technical document subsequent to the initial distribution, usually occurring as the result of a request, and usually handled by DTIC or NTIS.

Security and Policy Review - Review of information for public release carried out by a Public Affairs Office prior to release.

Small Business Innovation Research Program (SBIR) - A government-wide program that sets aside a small percentage of all R&D monies for small businesses providing technological services. Needs are specified in specific solicitations, and contracts are awarded from these solicitations.

Special Technology Groups - see Information Analysis Centers. This term is used by NTIS in their publications.

Sponsoring DoD Activity - The DoD activity or office directly responsible for initiating or supervising a program established by a contract, grant, or study agreement.

STINFO - see **Scientific and Technical Information**

STIP - see **Scientific and Technical Information Program**

Technical Document or Publication- Any document that contains technical information.

Technical Information - Information, including scientific information relating to RDT&E, engineering, production, operation,

use/maintenance of munitions and other military supplies and equipment.

Technology - All scientific or engineering efforts directed toward eliminating technical barriers and providing solutions to technical problems encountered in RDT&E programs.

Technology Transfer - The application of technology to a new use or user.

U.S.C. - see **United States Code**

U^2 (Unclassified, Unlimited) - A common term for documents using distribution statement A.

United States Code (U.S.C.) - The listing of all United States Statutes of a permanent and general nature. Basically, the "laws of the land."

US Munitions List - An enumeration of the arms, ammunition, and other defense materials covered by the ITAR. This list is part of the ITAR and is found in 22 CFR Part 121.

Work Unit - The smallest segment into which research or technology efforts are divided for local administration or control.

Work Unit Information System (WUIS) - A system for the reporting, storage, and retrieval of technical and management data on DoD research and technology efforts at the work unit level; the information in the system is developed at the working level.

Work Unit Summary - The set of data elements that describes for each work unit what, where, for whom, by whom, for how long, for how much, and the progress of the R&T being reported. The information contained on DD Form 1498.

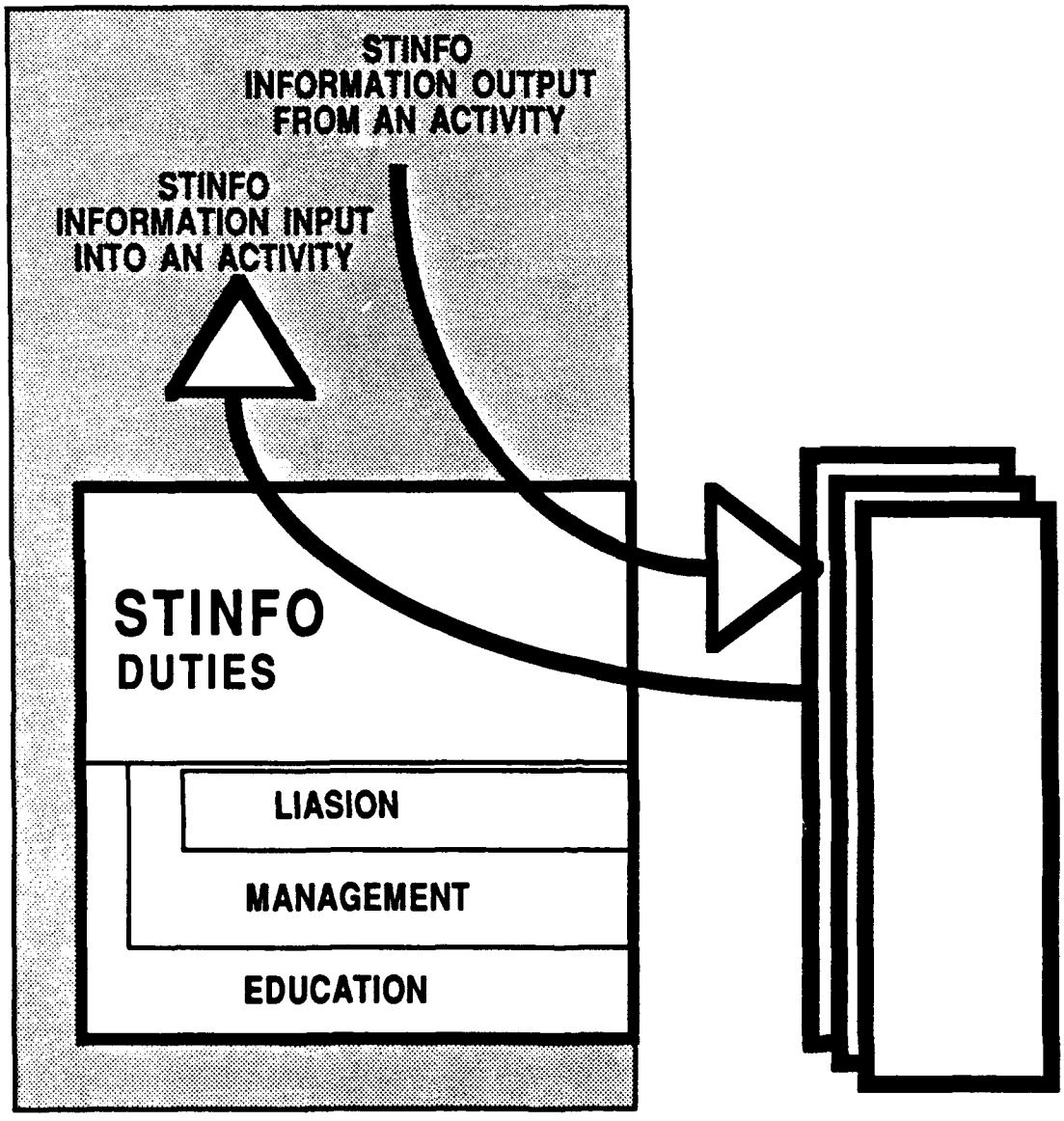
WUIS - see **Work Unit Information System**

6. STINFO Duties - General

This section contains a general discussion of the STINFO Program Manager duties. Specific information on each duty is contained in the sections following this one, starting with Section 7.

6.1. Key Points

- The STINFO Program Manager duties are listed in AFR 83-1
- Additional "unwritten" duties are:
  - That all of the STINFO duties be carried out.
  - The STINFO office and function be run in a professional manner.
  - The STINFO manager become the "single point of contact" for all STINFO activity at that organization.
- STINFO duties are very wide-ranging and can be divided into:
  - Duties that are outward-directed and relate mainly to information being sent out from the STINFO office.
  - Activities that relate to potentially withholding information.
  - Duties that are inward-directed and relate to information support for the organization.
  - Educational duties.
  - Liaison duties. Maintaining on-going, working relationships with other organizations involved in information supply or support functions.
  - Management duties concerning the STINFO function and office.



6.2. Specific Duties

The specific duties of a STINFO Program Manager, as listed in AFR 83-1 are to:

1. Set up procedures to provide or obtain scientific and technical information services to meet the needs of the organization.

2. Provide support to the organizational commander for a domestic technology transfer program. The STINFO Program Manager shall assist in executing the Office of Research and Technology Application (ORTA) function.

3. Ensure that the activities of the STINFO program are closely coordinated with efforts in the Data Management program. Ensure that STINFO needs are accurately specified on DD Forms 1423, Contract Data Requirements List (CDRL), and that contractor-generated data products are entered in the STINFO system.

4. Establish procedures to ensure that all technical data produced within the organization is reviewed and properly marked to control secondary distribution.

5. Establish a technical publications program to ensure timely publication of technical documents. Ensure the qualitative review of technical publications. The review will cover technical pertinence of the content, adherence to report writing standards, inclusion of meaningful title, abstract and key words, distribution limitations, and initial distribution list.

6. Maintain close liaison with Air Force foreign technology specialists to ensure that foreign research results are available to Air Force scientists, engineers, and managers.

7. Ensure the timely input of data into prescribed databases; for example, the Work Unit Information System database and the Technical Reports database at the Defense Technical Information Center (DTIC), in order to keep them current and complete.

8. Monitor the operation of any Information Analysis Centers supported by the organization.

9. Plan methods to improve STINFO systems and procedures. Schedule and participate in meetings to discuss problems relevant to the STINFO program.

10. Conduct a continuous indoctrination program to inform scientists, engineers, and managers of their responsibilities to the STINFO program and to inform them of available STINFO products and services.

11. Help plan technical meetings; become familiar with foreign disclosure procedures when foreign nationals are invited to take part in meetings. Report on planned meetings and ensure that interested personnel are informed of such meetings.

12. Submit plans for improvements in STINFO services, to include internal changes, the knowledge of which may benefit other Air Force organizations.

13. Provide for interest profiles for the selective dissemination of information (SDI). DTIC's program of SDI will require a program to further disseminate the information to the individual user. To

accomplish this, the STINFO Office should develop and maintain profiles of interest to its technical personnel.

14. Be cognizant of RDT&E efforts which may have an impact on STINFO.

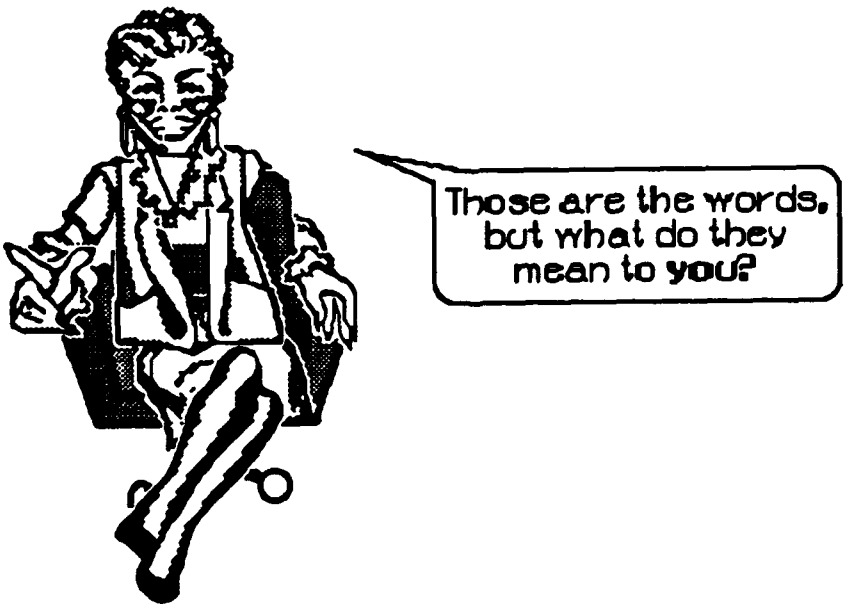
15. Ensure that all RDT&E contracts/grants policies include appropriate instructions regarding the generation and reporting requirements of STINFO.

16. Provide technical library services consistent with user requirements.

17. Ensure currency and effective coverage of primary distribution lists.

18. Provide for the collection, storage, and secondary distribution of those technical documents which have not been provided to DTIC because of distribution limitations. Ensure that bibliographic descriptions of these documents are reported and contained in the DTIC databases.

19. Collect data on the effectiveness of the program. Meaningful data are needed to measure the performance of the organization regarding the acceptance and discharge of their STINFO duties.



6.3. Information Out

A major duty of the STINFO office is to control the scientific and technical information flow out of an activity. The main components of this flow are technical publications, work unit summaries, and sponsored meetings. Another aspect of this information flow out from an organization that the STINFO office will be involved in is the information associated with the domestic technology transfer program.

6.3.1. Technical Publications

The three responsibilities associated with technical publications are:

> **5. Establish a technical publications program to ensure timely publication of technical documents. Ensure the qualitative review of technical publications. The review will cover technical pertinence of the content, adherence to report writing standards, inclusion of meaningful title, abstract and key words, distribution limitations, and initial distribution list.**

The STINFO Program Manager is tasked with the job of managing their organization's technical publications program. Should such a program not exist, they are responsible for creating it. A very important part of such a program is a qualitative review step. It is part of the STINFO Program Manager's job to ensure that this qualitative review is being carried out.

> **7. Ensure the timely input of data into prescribed databases; for example, the Work Unit Information System database and the Technical Reports database at the Defense Technical Information Center (DTIC), in order to keep them current and complete.**

Where STINFO from your organization is required to be either summarized or entered directly into a DoD database, it is your responsibility to ensure that the input is not only taking place, but is taking place in a timely manner. The major two DoD databases that you need to be concerned with are the Technical Reports database and the Work Unit Information System database, both of which are managed by DTIC.

18. Provide for the collection, storage, and secondary distribution of those technical documents which have not been provided to DTIC because of distribution limitations. Ensure that bibliographic descriptions of these documents are reported and contained in the DTIC databases.

Depending on the nature of your organization, a number of the technical documents might be withheld from DTIC. (For example, documents pertaining to communications and electronic intelligence are excepted from the DTIC collection.) In these cases, it is your responsibility to set up a local collection of these documents, and to provide a secondary distribution channel for them. With the exception of Top Secret materials, the bibliographic descriptions of the documents exempt from DTIC should still be be sent to DTIC.

6.3.2. Work Unit Information System (WUIS)

The STINFO responsibility relating to the Work Unit Information System is:

7. Ensure the timely input of data into prescribed databases; for example, the Work Unit Information System database and the Technical Reports database at the Defense Technical Information Center (DTIC), in order to keep them current and complete.

Depending on your organization, you may or may not be directly involved in the preparation and processing of the DD Form 1498, "Research and Technology Work Unit Summary." However, you are responsible for making sure that this information is being transferred to DTIC in a timely manner.

6.3.3. Meetings

The STINFO responsibility relating to technical meetings is:

11. Help plan technical meetings; become familiar with foreign disclosure procedures when foreign nationals are invited to take part in meetings. Report on planned meetings and ensure that interested personnel are informed of such meetings.

Organizations and individuals within your organization will, upon occasion, desire to hold technical meetings with an open audience. You will find that many of the individuals involved will not have sponsored a meeting before and will not be aware of the disclosure implications and the DoD Directives and AF Regulations relating to such meetings. It is your responsibility to provide guidance to these individuals concerning disclosure, submission of the presented papers to DTIC, and attendance at the meeting, and to inform the appropriate OSD office that such a meeting has been scheduled.

Note that the STINFO office will not, in most cases, be involved in local meetings whose audience is either (1) all Government employees or (2) Government employees and contractors.

6.3.4. Technology Transfer

The STINFO responsibility relating to Technology Transfer is:

2. Provide support to the organizational commander for a domestic technology transfer program. The STINFO Program Manager shall be assist in executing the Office of Research and Technology Application (ORTA) function.

At most Air Force organizations, the functions of the ORTA office and the STINFO office have been separate. As part of the new AFR 83-1, the STINFO Program Manager is responsible for assisting the ORTA function.

Whether you are personally carrying out the ORTA function or not, it is your responsibility to (1) fully support all aspects of the technology transfer program at your activity, and (2) ensure that all duties of the ORTA function are being carried out.

6.4. Withholding Information

Some of the STINFO Program Manager's duties relate to the (potential) withholding of information. For the most part, these duties are concerned with the distribution of STINFO, including distribution statements, distribution lists, and distribution limitations.

6.4.1. Distribution Statements

The STINFO function dealing with distribution statements is:

> **4. Establish procedures to ensure that all technical data produced within the organization is reviewed and properly marked to control secondary distribution.**

You are responsible for seeing that correct distribution statements have been placed on the STINFO being produced by your activity. This will involve both (1) providing guidance to the controlling office engineers and scientists producing documents, and (2) reviewing the statement they assign. This function will involved a knowledge of export-control (and contractor access to this information), knowledge of the FOIA, and the function of the Public Affairs office and the security review process.

6.4.2. Distribution Lists

The STINFO function dealing with distribution lists is:

> **17. Ensure currency and effective coverage of primary distribution lists.**

The STINFO Program Manager will be, in many cases, directly involved in the primary distribution of documents produced by an organization. Whether this is the case at your organization or not, you are responsible for checking the primary distribution list to ensure that it is up-to-date and that it includes all relevant addressees.

6.5. Information In

The third major area of the STINFO office's duties concerns information coming into an organization. Most of this information will be for direct user support, including the STINFO office being the focal point for access to DTIC services.

6.5.1. User Support

The specific user support STINFO functions are to:

1.	**Set up procedures to provide or obtain scientific and technical information services to meet the needs of the organization.**

It is part of your job to (1) determine if the information needs of your organization are being met, and if they are not, (2) set up procedures or whatever else is necessary to see that these needs are being met.

6.	**Maintain close liaison with Air Force foreign technology specialists to ensure that foreign research results are available to Air Force scientists, engineers, and managers.**

The primary vehicle for ensuring that foreign research results are getting to Air Force engineers and scientists is the Central Information Reference and Control System, Version 2 (CIRC II). If your organization has any potential need at all for this information, it is your responsibility to (1) set up access to the CIRC II system, and (2) ensure that all engineers and scientists at your activity know of its existence and how and when to access it.

6.5.2. DTIC

The user-support STINFO responsibilities concerning DTIC are:

1.	**Set up procedures to provide or obtain scientific and technical information services to meet the needs of the organization.**

You are responsible for your organization's DTIC-related activities. You are responsible for (1) setting up and administering a DTIC account, (2) providing access to the DROLS system, and (3) promoting these services to the engineers and scientists at your organization.

13. Provide for interest profiles for the selective dissemination of information (SDI). DTIC's program of SDI will require a program to further disseminate the information to the individual user. To accomplish this, the STINFO Office should develop and maintain profiles of interest to its technical personnel. While the methods for maintaining such profiles and selecting incoming documents will vary with the size and mission of the organization (in some cases a computer program may be required), it is the daily person-to-person contact between the STINFO Office and the technical personnel, with its continuing feedback, that is fundamental to the validity of such a program. Another factor that is vital to the program is the scientist-to-scientist, scientist-to-engineer, or scientist-to-manager contact.

A very important service of DTIC is the compilation and distribution of SDI reports from their databases. In order to generate these, DTIC must have interest profiles to search against. It is your responsibility to compile a database of these interest profiles, maintain these profiles, and see that they are registered with DTIC.

6.5.3. Library & Technical Information Centers

The STINFO responsibility concerning technical libraries is:

16. Provide technical library services consistent with user requirements.

Because the technical library and the STINFO office have a number of overlapping functions, it is important that these two organizations work in concert to achieve the Air Force STINFO goals. Specifically, it is your responsibility to review your organization's technical library services and do whatever is necessary to see that these services are consistent and responsive to local user requirements.

6.6. Education

The STINFO duty concerning education is:

10.	**Conduct a continuous indoctrination program to inform scientists, engineers, and managers of their responsibilities to the STINFO program and to inform them of available STINFO products and services.**

It is part of your responsibility to develop and implement an ongoing indoctrination program so that all scientists, engineers, and managers are fully aware of those aspects of the STINFO program that relate to their job. This program should consist of (at a minimum) a user's handbook or guide, and a presentation given as part of the initial employee orientation and given as part on the ongoing training provided to those employees generating and using STINFO.

6.7. Liaison

The specific STINFO functions concerning liaison with other information-related offices are:

3. Ensure that the activities of the STINFO program are closely coordinated with efforts in the Data Management program. Ensure that STINFO needs are accurately specified on DD Forms 1423, Contract Data Requirements List (CDRL), and that contractor-generated data products are entered in the STINFO system.

The identification of contractor-generated STINFO starts with its listing on the CDRL. This listing identifies the items, delivery dates, and rules (Data Item Descriptions) that are to be followed by the contractor. It is your responsibility to ensure that the controlling office is specifying the correct DID for each STINFO product, and that the information from the CDRL is being entered into your local STINFO monitoring system.

8. Monitor the operation of any Information Analysis Centers supported by the organization.

If there are any formal (funded) or informal (locally funded) IACs associated with your organization, they will be both producers and users of STINFO. It is your responsibility to monitor their operation and ensure that (1) any STINFO generated by the IAC is subject to the proper distribution controls, and that (2) any STINFO distributed by the IAC is properly marked and controlled.

15. Ensure that all RDT&E contracts/grants policies include appropriate instructions regarding the generation and reporting requirements of STINFO.

Similar to responsibility number 3 above, it is your responsibility to see that all offices initiating contractual agreements that involved STINFO are aware of the implications of the Data Item Descriptions, and have referenced the correct DID in their CDRL.

14. Be cognizant of RDT&E efforts which may have an impact on STINFO.

A start-up requirement for all new RDT&E efforts is a search of the DTIC databases that could potentially impact on that work. It is your responsibility to stay aware of these new efforts, as well as being aware of the other STINFO-using and STINFO-generating efforts at your organization in order to actively support the information needs of these efforts, as well as anticipate any future needs they might have.

6.8. STINFO Management

The STINFO duties that relate to the management of the STINFO office and its function are:

9. Plan methods to improve STINFO systems and procedures. Schedule and participate in meetings to discuss problems relevant to the STINFO program.

Setting up a STINFO program or continuing an existing program will be, of course, the major part of your duties. However, you are also responsible for continually reviewing and seeking to improve your program. In addition, you are expected to participate in any local meetings or program-wide meetings that are relevant to the STINFO function.

12. Submit plans for improvements in STINFO services, to include internal changes, the knowledge of which may benefit other Air Force organizations.

Having improved your program, you have a responsibility to the STINFO program to make these improvements known to the STINFO Program Management and other STINFO offices in order that they may benefit from your knowledge.

19. Collect data on the effectiveness of the program. Meaningful data are needed to measure the performance of the organization regarding the acceptance and discharge of their STINFO duties.

Without measurable data, there is no way for <u>you</u> to know if you are carrying out your duties effectively, or if the processing and use of STINFO is at all effective at your organization. Some specific measures will be discussed later in the course, but it should be obvious that DTIC usage statistics will give you an indication of the effectiveness of DTIC promotion and usage convenience, and tracking report review/distribution processing times will give you a metric for comparison. It is your responsibility to identify, collect, analyze and tabulate data that relates to the STINFO function.

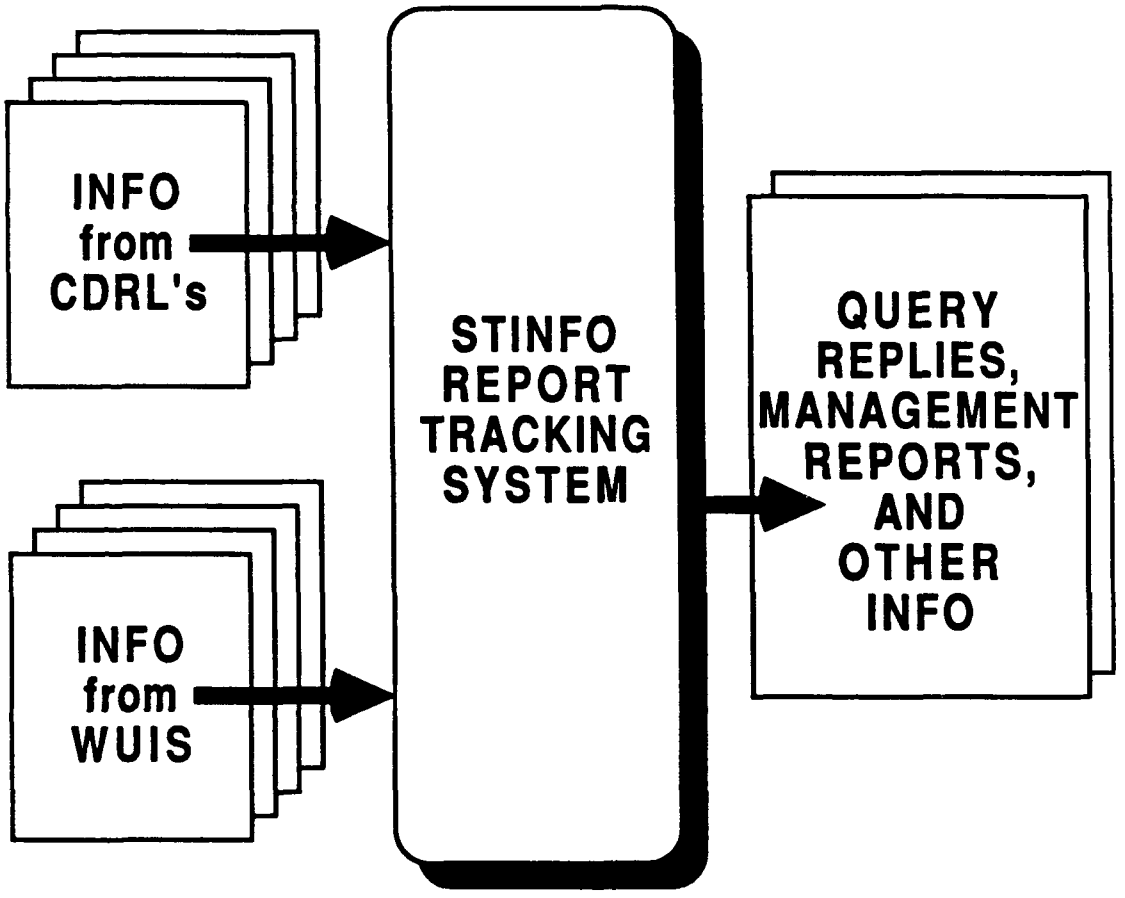

I'm responsible
for all that?
Oh no...

7. STINFO Duties - Tracking and Processing STINFO Materials

7.1. Key Points

- One of the major duties of the the STINFO office is to track and process all STINFO materials coming into an organization from contractual or in-house efforts, and going out from an organization through primary distribution.
- Publication Tracking consists of an accounting procedure containing information about the status of all projected and in-process technical reports.
- The STINFO Program Manager is responsible for Qualitative Review of the technical publications produced by their organization.
- The STINFO Program Manager is responsible for setting up a Technical Publication Processing system at their organization, and providing assistance to authors/contracting offices concerning the forms, formats, and procedures to follow in order to publish a technical report, journal article, or other STINFO item.
- While not responsible for filling out the Report Documentation Page, the STINFO Program Manager is responsible for providing any necessary guidance to the author/contracting office filling out this form, and for checking the Report Documentation Page during the Qualitative Review step.
- ANSI Z39.18 is the new format standard, replacing MIL-STD-847B. They are very similar and this change should cause no problems.
- The STINFO Program Manager is also responsible for:
  - Maintaining the current distribution list for reports.
  - Examining and updating procedures in order to minimize report processing time.
  - Ensuring that STINFO needs are reflected on the CDRL.
  - Managing the limitation review process, printing and distributing STINFO.

7.2. Technical Publication Tracking



The STINFO Program Manager is responsible for tracking all technical publications from their specification as part of a Contract Data Requirements List (CDRL) or the introduction of a new Work Unit, through the distribution of the publications.

What is meant by "tracking" is to keep an account of all projected and in-process technical publications associated with your organization. If you have established a working procedure for this process, and are informed as to the status of all these technical publications, then you are doing this aspect of your job.

7.2.1. Tracking System Inputs

The three sources for technical publications are (1) contractor-generated publications, (2) in-house generated publications, and (3) unplanned publications. Since the first requirement of an effective

tracking system is to capture the initial inputs as soon as they are known, it is important to examine (and "hook" into) the first two of these sources.

Identifying anticipated contractor-generated publications is actually quite easy because, with few exceptions, all such publications will be identified on the CDRL. Clearly, coordination with the Data Management Office will be necessary to tap into this data source.

Identifying future in-house publications is a little more complex, but is aided by the DoD requirement that the results of each Work Unit be documented. Hence, each Work Unit at your organization will probably equate to one or more technical publications, and by tracking the Work Units and by contacting the responsible DoD person, you can anticipate future publications. Since you have (or will have) access to the WUIS database, a little smart downloading of information from either a local database or DTIC will save you a lot of trouble.

Some of the specific inputs that you should consider including in a tracking system are:

1. **Identification Information**
   - Publication Number (STINFO assigned)
   - Associated Work Unit (from WUIS or CDRL)
   - Author (from WUIS or CDRL)
   - Responsible DoD Person/Office (from WUIS or CDRL)
   - Contract or In-House (from WUIS or CDRL)
   - Contract Number (from WUIS or CDRL)

2. **Basic Tracking Information**
   - Status (STINFO assigned)
   - Contract Start Date (from WUIS or CDRL)
   - Estimated Completion Date (from WUIS or CDRL)
   - Date Due from Contractor (from WUIS or CDRL)
   - Date Received in STINFO (STINFO assigned)

3. **Processing Tracking**
   - Dates to/from Editing (STINFO assigned)
   - Dates to/from Composition (STINFO assigned)
   - Date to/from Author Proof (STINFO assigned)
   - Date to/from Commanding Officer (STINFO assigned)
   - Date to/from Qualitative Review (STINFO assigned)
   - Date to/from PA for U^2 Publications (STINFO assigned)
   - Date to/from Printing (STINFO assigned)
   - Date Distributed (STINFO assigned)

7.2.2. Technical Publication Tracking

Setting up a tracking system is, of course, only the first step. The second step in the process is putting the system to work: the actual tracking of the materials covered by the system. To every extent possible, you should try and have the information come to you, as opposed to your having to go out after it. In fact, one of the purposes of a tracking system is to signal you when a particular item is overdue and may need your personal attention.

The actual data elements collected in a tracking system are a consequence of the possible uses that the system will be put to. Clearly, the generation of regular summary publications is one such use, as is the answering of questions relating to the status of a particular item in process. Once the set of outputs is established, the necessary inputs become obvious.

For each data element you plan to include in your tracking system, you should identify (1) the precise source, (2) how and when the data item will be entered into the system, and (3) how the data item will be maintained in the case of variables quantities such as projected completion date. Consider dropping any data element that you cannot fully account for, and don't add extra, unnecessary data elements for the sake of "completeness."

7.2.3. System Outputs

Aside from helping you manage the STINFO being generated at your organization, such a system will be useful in a number of situations:

1. To respond to queries regarding the specific status of a technical publication.

2. To generate regular status reports summarizing all identified future and in-process publications. These status reports should be an important contribution to your organization's management, as well as provide you with the "big picture" of this aspect of your job.

3. To generate summary statistics needed to measure performance. Since one of the goals of the STINFO program is the timely processing and distribution of all STINFO materials, the generation of regular summaries provides the STINFO office with the metrics against which performance can be measured.

4. To alert you and the organization management to potential problems. Two such examples would be identified technical publications which are long overdue in reaching STINFO, and publications which have bogged down in processing.

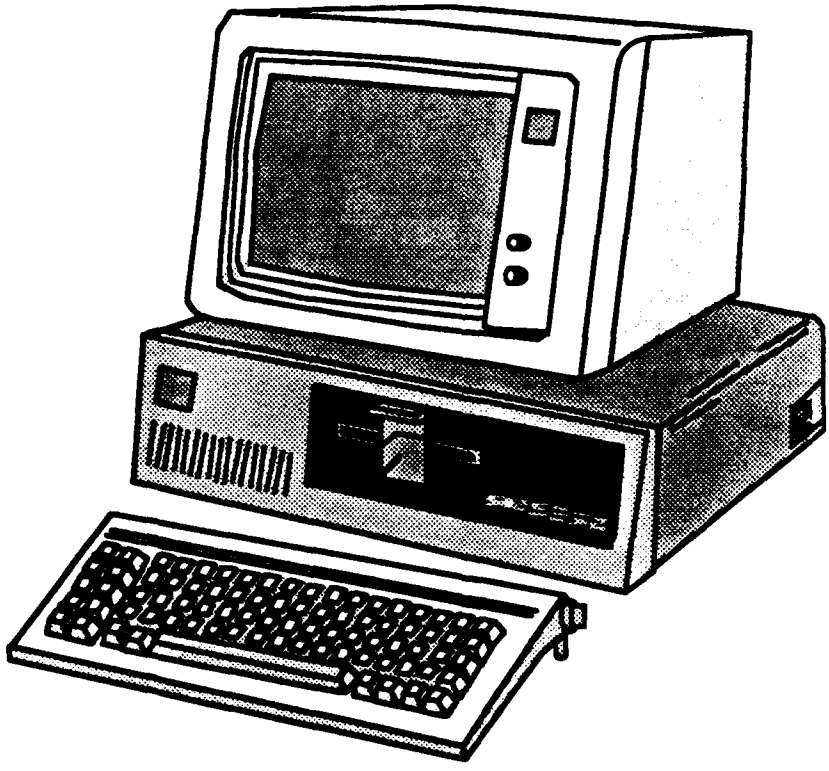
5. To trigger reminders to the contracting office that the technical publications acceptance (signoff on the DD 250) should not be made before the determination of whether the technical publication was written as per the controlling DID.

7.2.4. System Implementation

The complexity of a publication tracking system is clearly a function of the number of technical publications being generated by your organization and its contractors. Clearly, if your organization produces a limited amount of STINFO and you are processing a small number of publications, then a simple notebook tracking system will be sufficient and you should resist the temptation of "computerizing" this function.

However, if you are processing any larger number of publications, today's microcomputer technology can be a godsend. It is important to realize that because a tracking system would involve a single file, a few fields, and a small number of records, it is amenable to even the simplest database management system and need not be the subject of an involved DBMS development.

As part of the last topic of this workshop, PC Applications in STINFO, the development of such a system will be addressed.



7.3. Technical Publication Processing

In addition to tracking technical publications, the STINFO Program Manager has an active responsibility in the processing of the publications. Specifically, the STINFO office should be focus where the draft is send for subsequent coordination of the editorial, composition, review, printing and distribution steps. Unfortunately, there seems to be a mistaken impression among some of the working level engineers and scientists as to the role of the STINFO office. It is very important that you are clear as to what your duties are in this area.

It is not part of the STINFO duties to fill out the Publication Documentation Page or assign classification markings. Nor is it part of the STINFO duties to bring substandard publications up to the quality levels expected by your organization or the standards contained in ANSI Z39.18.

Your duties in this area should be considered (1) coordination of the various steps to getting a publication "out-the-door", (2) giving guidance to the author/contract monitor concerning marking, limitation statements, and format standards,and (3) qualitative review of the document and the Publication Documentation Page.

7.3.1. Types of Technical Publications

Technical publications are the documented results of Air Force technical efforts. The term "technical publication" is very broad and includes technical reports and designated publication series, journal articles, conference proceedings, handbooks and user guides.

All technical publications which will ever go outside the originating organization qualify as STINFO and therefore must go through the publication processing cycle and be provided to DTIC. Exceptions to this are materials that do not qualify as STINFO, and subsequently do not have to be supplied to DTIC. These are materials in the general categories of management; operational; financial; administrative; data of very temporary value; engineering and logistics data (Technical Orders, Specifications, Manuals); special categories of intelligence; special access publications (Top Secret, Cryptographic); and planning studies.

Technical reports are normally final reports and document empirical findings, resolve an R&D issue, summarize the state-of-the-art of

a technology, etc. They are the method of publication when the research results reported are of special significance to the Air Force, other Government organization, private industry, or a contractor.

A technical report has many advantages as a reporting tool. Some advantages are:

1. No limitations on length or depth of detail.
2. Direct distribution to those having a need for the information.
3. Reproduction without copyright questions.
4. Possible lengthy delays in publication time can be avoided in certain situations.

Journal articles published in well-known technical journals are the universally accepted standard of professional recognition. Journal articles are considered technical reports and are handled as such.

The advantages of journal publications are:

1. Professional prestige.
2. Considered refereed publications.
3. Dissemination to a wider, more diversified audience.
4. Specialized audience.

The disadvantages of journal publications relative to technical reports are:

1. Copyright question in connection with DTIC reproduction of the article. (The article itself cannot be reprinted because the publishers have a proprietary right to the page layout, type of print, etc. However, the information or data and words are in the public domain and are not subject to copyright.)
2. Limitation of length of material.
3. Long publication time lags for most publications.
4. Inaccessibility of the articles except through subscription or a technical library.

Depending on your organization, you may find other types of local technical publications that do not qualify as technical reports, but that have some things in common with technical reports. The usual thing that they do not have in common with technical reports is a report documentation page and submittal to DTIC. Some examples of these "sub-technical reports" are technical "papers" and "special reports." No matter what local types and variations exist, keep in mind that if the publication will

ever go outside the originating office, it must go through the processing cycle.

7.3.2. Qualitative Review

At most organizations, a technical publication must go through four separate review steps of which the qualitative review is logically the second step. These four review steps are:

1. Division Chief/Technical Director - for quality and technical accuracy of publication contents and for approval.
2. STINFO - for qualitative review.
3. Editing - for proper grammar, punctuation, format, clarity, conformance to local style requirements, and conformance to standards.
4. Public Affairs - for security and policy review of all publications marked with Statement A (unclassified, unlimited.)

It is your responsibility to ensure that every technical publication leaving your organization be given a qualitative review of the contents, marking, and Report Documentation Page. This is in addition to whatever editing, security and policy review, and technical review procedures are in effect at your organization.

During this qualitative review, you should check the following:

1. Does the publication have a meaningful title.
2. Is the SF 298 complete.
3. Does the abstract on SF 298 present a true reflection of the publication's contents.
4. Have the subject terms been assigned from the ***DTIC Retrieval and Indexing Terminology*** (DRIT) publication?
5. Does the format conform to the the ANSI Z39.18 standard.
6. Has the document been assigned an appropriate distribution statement, and has the statement been placed in the appropriate place.
7. Have security markings been placed according to AFR 205-1.

7.3.3. Report Documentation Page (SF 298)

A copy of SF 298, "Report Documentation Page," must be included as the title (first) page of each technical publication submitted to DTIC. (SF 298 is the replacement for DD 1498.) This form provides a one-page summary which is vital to DTIC for processing, announcing, and linking databases. This form is filled out by the author/contracting office with guidance from the STINFO office, and checked by the STINFO Program Manager as part of the qualitative review process.

A detailed instruction sheet for filling out this form is currently included on the back of the form. Although the instructions are thorough and clearly stated, all blocks should be checked for errors and omissions. The blocks that the originator might need assistance on are the ABSTRACT (block 13) and the SUBJECT TERMS (block 14). If the originator is not aware that the DTIC system is basically a fixed vocabulary system, they might totally disregard the need to check the DRIT for appropriate words.

Note that in the case of articles published in technical journals, only the SF 298 need be submitted to DTIC, not copies of the article itself.

7.3.4. ANSI Z39.18

American National Standard ANSI Z39.18, *Scientific and Technical Reports: Organization, Preparation and Production*, has recently replaced MIL-STD-847B, *Format Requirements for Scientific and Technical Reports Prepared by or for the Department of Defense*. This new standard is very similar to the old, and users of MIL-STD-847B should have no trouble converting to the new standard.

This standard contains guidelines for the organization, preparation, and production of scientific and technical reports. Topics covered in the standard are:

1. Report Organization including the order of elements, order and organization of all front matter (cover, report documentation page, abstracts, contents, etc.), order and organization of the text , and organization of all back matter (appendixes, bibliographies, glossary, distribution list, etc.).

2. Report Preparation including format, terminology, inclusion of formulas, layout of graphs and tables, etc.

3. Report Production including graphic design, typography, layout and assembly, reproduction, and binding.

You should keep in mind that this standard is not a style guide, and that every STINFO-producing organization will probably still need a local style guide to define such subtleties as joint authorship, acknowledgements, citations, spacing, acceptable fonts, etc.

7.3.5. Primary Distribution List

It is the STINFO Program Manager's responsibility to maintain an up-to-date distribution list for reports created by the organization. Guidance for the distribution of technical publications is given in AFR 83-2, a copy of which is included in the Appendix.

Some points to keep in mind are:

1. Ensure distribution to DTIC. (2 copies).
2. If appropriate, distribute to the three AFIFIOs.
3. If appropriate, distribute directly to any relevant IACs.
4. Classified reports must include a copy of the initial distribution list as the last page of the report, and hence must have a distribution list.
5. The actual mailing list will be subject to local guidelines, but the primary distribution information included in AFR 83-2 should be followed.
6. Reports should be distributed as widely as possible, consistent with security and distribution requirements. This means that (1) classified reports can only be distributed to those with a need-to-know, valid security clearance, and proper storage facilities, (2) foreign addressees must have approval of the Foreign Disclosure Policy Office, and (3) only those contractors on the Qualified Contractor List can receive export-controlled reports.
7. Once primary distribution has been made, all subsequent requests (secondary distribution) must be processed through either DTIC or NTIS as appropriate.

7.3.6. Minimizing Report Processing Time

"The overriding priority of the DoD STIP is to achieve **timely** and effective exchange among ...." This statement, taken from DoD 3200.12, says it all. The goal is to get the information exchanged, not to delay publication unnecessarily because of slipshod processing procedures, old technology, and bureaucratic hurdles. It is your responsibility to examine the report processing procedures (that you are responsible for setting up) at

your organization on an ongoing basis to determine where the process can be speeded up.

The goal is clear: to minimize the time between the end of RDT&E efforts and publication distribution. This goal then, provides one (of the many) rationales for a publications tracking system, and defines one of the necessary outputs from the system: summary statistics on the processing times at each point in the process.

7.3.7. STINFO Needs On DD Form 1423 (CDRL)

Each line item on the Contract Data Requirements List (CDRL) corresponds to a contract deliverable. (The CDRL is discussed in a later section of these notes.) The form of the deliverable is specified by (1) the Data Item Description that is referenced as the "Authority" in block 4 of this form, and (2) any further qualifications and instructions included in block 14 under "Remarks."

Should you have any specific needs concerning contractor-generated reports that are appropriate for inclusion in the Remarks block, you should take the initiative to discuss these needs with the Data Management Office and see that these needs are included whenever the corresponding type of STINFO is called for.

7.3.8. Limitation Review

AFR 80-45 requires that all documents containing distribution statements B, C, D, E, F, or X must be reviewed by the controlling office whenever a request is received, to determine if the limitation can be either widened or removed. The goal is, of course, to use a less restrictive statement whenever conditions permit.

One approach that can be taken is to maintain a small local database of locally-generated reports that contain distribution limitations, and on a periodic basis query the controlling office for any limitation changes. Such a small database could be easily constructed on an ad-hoc basis by simply downloading and post-processing an appropriate search using the DROLS TR database.

The advantage of the approach outlined in AFR 80-45 is that only reports being requested would be reviewed and those of no interest would require no additional thought or processing time. In addition, this approach is responsive to the instructions for filling out DTIC Form 55, *Request for Release of Limited Document*, which states that a review should take place concurrently with the release determination, and DTIC be notified of the results of the review, including a letter explaining why the limitation cannot be removed if that is the determination. However, independent of which approach you take, you are responsible for ensuring

that technical publications with limited distribution statements are periodically reviewed.

7.3.9. Printing and Distributing STINFO

The rules for the printing of technical publications are included in AFR 6-1, "Policies, Procedures and Standards for Production and Procurement of Air Force Printing, Duplication, Copying and Microform."

7.3.10. Report Processing in the Computer Age

The phenomenal growth in the use of microcomputers is causing the entire report processing chain to be examined and restructured. Already, submission of documents for editorial review and processing is being made on floppy diskettes and through LANs, as opposed to it being a strictly hard copy process. It is difficult, if not futile, to argue with the logic of this change. It really makes very little sense for a publication that was written on a word processor to be printed out, reviewed and marked up in paper form, and then for these modifications to be re-keyboarded by the author.

The advent of page layout programs has taken this process one step further. Now, it is no longer necessary to treat the textual and graphic parts of a publication separate, and the complete publication can be written, composed, edited, and reviewed without ever have existed in paper form up to the printing and distribution step. The potential time and work savings involved in this process are incredible and will impact the STINFO office.

It is important for the STINFO Program Manager to keep up with this technology, and where appropriate include this technology in any STINFO procedures that are implemented. This topic, and other uses of PCs in the STINFO function, will be discussed further in Section 17 of these notes.

7.4. Documentation

The major documentation to be aware of concerning tracking and processing STINFO materials are:

1. ***AFR 83-2: AF Technical Publications Program.*** Basically, this regulation covers rules for writing, processing, distributing, and publishing technical documents generated either in-house, or under contract, subcontract, or grant.

2. ***DTIC Retrieval and Indexing Terminology.*** AD-A176 000. DTIC. This is the authoritative listing of subject terms used to index STINFO in the various DTIC databases. It should be referred to by whoever assigns subject terms in Block 14 of the Report Documentation Page, and should be used in checking to see that this information is correct. It is also used extensively when constructing search strategies for use with DROLS.

3. ***Scientific and Technical Reports: Organization, Preparation, and Production.*** ANSI Z39.18. This is the new standard for technical report formats that replaced MIL-STD-847B.

8. STINFO Duties - Work Unit Summaries

8.1. Key Points

- The Work Unit system is part of the DoD STIP, and is controlled by DoD Reg 3200.12-R-1.
- Work Units are the smallest segment into which research or technology efforts are divided.
- Work Unit information is recorded on DD Form 1498 and reported to DTIC.
- Detailed instructions for filling out the DD 1498 are contained in DoD 3200.12-M-1, "Research and Technology Work Unit Information System Data Input Manual."
- The Work Unit Information System Database is the central store of R&TWUIS data, maintained at DTIC, and accessible online as part of the DROLS system.
- STINFO responsibilities concerning Work Units are:
  - Ensure that the R&TWUIS database is searched by the project engineer/scientist during the planning stage of any new project.
  - Ensure that all new Work Units for their organization are scanned for STINFO outputs, and once identified, the STINFO items are tracked through to final distribution.

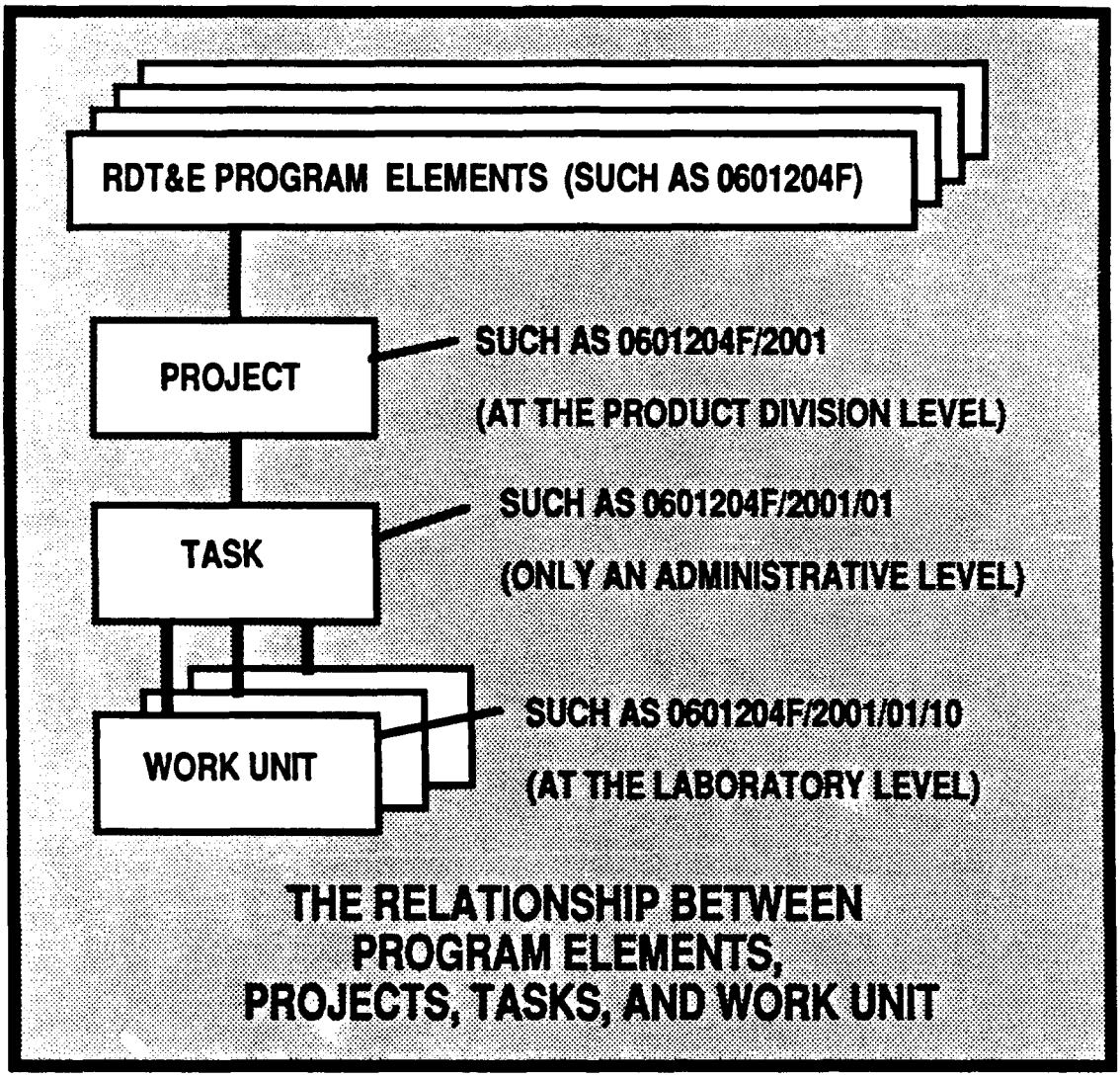
8.2. Discussion

What a Work Unit Is

A Work Unit is the smallest segment into which research or technology efforts are divided for local administration or control. Each Work Unit has a specific objective, finite duration, and results in an end product. It is technically distinct in scope, objective, and duration from other research or technology efforts with which it may be aggregated for either financial, administrative, or contracting purposes.

A Work Unit Summary (the information contained in DD Form 1498) is the set of data elements that describes for each Work Unit what, where,

for whom, for how long, for how much, and the progress of the R&T effort being reported.



The Purpose, Goal, and Objectives of the Work Unit System

The purpose, goal, and objectives of the Work Unit system are defined in DoD Regulation 3200.12-R-1 and in DLAM 4185.4. The summary below is taken from these sources.

The purpose of the R&TWUIS is to provide managers, engineers, and scientists a comprehensive database containing summary descriptions of the technical content, performers, monitors, and funding sources of DoD research or technological efforts. The goal is to increase the effectiveness of the entire DoD RDT&E program by making this database available to DoD

managers, engineers, and scientists, as well as the DoD contractor base in industry.

The specific objectives are to:

1. Help R&D managers identify DoD R&T efforts in a broad range of scientific disciplines and technologies.

2. Permit managers to easily coordinate programs with other DoD components and with other agencies and branches of the federal government to eliminate duplication of effort.

3. Help individual scientists and engineers determine current and past efforts related to their own work.

4. Enable scientists, engineers, and managers to identify individuals working in technical areas of interest.

5. Allow scientists and engineers to maintain current awareness through periodic reviews of pertinent work units.

6. Enhance the efficiency and cost effectiveness of the the defense contractor community by providing knowledge of ongoing DoD work so their R&D efforts can be focused toward national defense and military requirements.

WUIS Reporting

The WUIS reporting is handled by the WUIS focal point within the organization. This person is typically in the Plans and Programs Office or the Data Management Office.

Work units are required for every technically distinct effort performed by or in an RDT&E activity, each individual contract or grant, or each R&T effort performed by a non-DoD government agency but funded by DoD through an interagency transfer of funds. Reporting is mandatory for all R&T categories; the Program Categories 6.1 (Research), 6.2 (Exploratory Development), 6.3A (Advanced Technology Development); all work under the program control of the Deputy Under Secretary of Defense (Research and Advanced Technology))USDR&AT; all work units from all RDT&E program categories (6.1 through 6.7) with U.S. academic institutions, and all DoD contract studies.

The work unit summaries are required to be reported within 30 days of either initiation, change, completion, or termination of an effort.

The inputs into the R&TWUIS system are taken from the DD 1498 form, (usually integrated into a local management information system), and transmitted in machine-readable form directly to DTIC. When paper copies are submitted, the DD Form 1498 itself is used. Details on filling out

the DD Form 1498 are contained in DoD 3200.12-M-1, "Research and Technology Work Unit Information System Input Manual."

8.3. Documentation

The major documents involved in the R&TWUIS that you need to be aware of are:

1. DoD 3200.12-R-1, "Research and Technology Work Unit Information System Regulation"
2. DoD 3200.12-M-1, "Research and Technology Work Unit Information System Input Manual"
3. AFR 80-12, "Work Unit Information System"
4. DLAH 4185.4, "Research and Technology Work Unit Information System Database"
5. DLAM 4185.18, "Defense RDT&E Online System, Dial-Up Retrieval Self-Training Manual"

9. STINFO Duties - Technology Transfer

9.1. Key Points

- Technology Transfer is the transfer of knowledge, facilities, or capabilities developed under federal funding to the public or private sector.
- Technology transfer deals with domestic transfer only.
- Under the new AFR 83-1, the STINFO Program Manager is responsible for assisting the Office of Research and Technology Application (ORTA) function.
- The controlling regulation for this program is DoD 3200.12-R4, "Domestic Technology Transfer Program Regulation"
- The organizations involved in Technology Transfer are:
  - Center for the Utilization of Federal Technology (CUFT).
  - Federal Laboratory Consortium (FLC) for Technology Transfer.
  - Office of Research and Technology Application (ORTA).

9.2. Discussion

DoD Regulation 3200.12-R-4 established the DoD Domestic Technology Transfer Program. The purpose of this regulation is to "ensure the full use of the Nation's Federal investment in research and development, stimulating improved utilization by State and local governments and the private sector."

This regulation contains three major items:

1. The DoD policies concerning technology transfer.
2. The responsibilities of the Heads of DoD components.
3. The functions of the Office of Research and Technology Applications (ORTA).

The responsibilities of the Heads of DoD components are to:

1. Establish an Office of Research and Technology Applications (ORTA) at appropriate laboratories to perform the technology transfer functions.

2. Specify the R&D activities that will require a full-time individual to be responsible for the ORTA function.

3. Support the policies set out in the regulation.

4. Designate a headquarters point of contact for domestic technology transfer activities.

5. Develop appropriate goals or corporate plans to achieve the objectives of the Domestic Technology Transfer Program.

6. Encourage and cooperate with the establishment of technical volunteer programs as a resource to complement and support domestic technology transfer activities.

7. Establish a system for collecting and forwarding Technology Application Assessments to the Center for the Utilization of Federal Technology.

8. Establish a mechanism for coordinating domestic technology transfer efforts with the Small and Disadvantaged Business Utilization Specialists for the purpose of stimulating commercialization of appropriate technologies by small business.

9. Establish a mechanism to provide appropriate security review of domestic technology transfer efforts.

The specific duties of the ORTA, which should be the information of highest interest to you, is covered in the next section.

9.3. Office of Research and Technology Applications (ORTA)

The Stevenson-Wyler Technology Innovation Act of 1980, Public Law 96-480, as amended by Pubic Law 99-502, called for the establishment of an Office of Research and Technology Applications (ORTA) at each Federal laboratory.

There are two provisions of this law that you should be aware of. Specifically, (1) if you are associated with a laboratory having 200 or more scientific or technical positions, there must be one or more full-time staff associated with ORTA, and (2) the laboratory must spend 0,5% of its budget for technology transfer, including support of the ORTA function. The requirement to spend 0.5% can be waived if the Agency submits to Congress an explanation and alternate plans for the conduct of the technology transfer function.

The functions of the ORTA are spelled out in DoD 3200.12-R-4 These functions are very similar to those listed in the Public Law, and are:

1. To prepare an application assessment of each research and development project which has potential for successful application in State or local government or in private industry.

2. To provide and disseminate information on federally owned or originated products, processes, and services having potential application to State and local governments and to private industry.

3. To cooperate with and assist the Center for the Utilization of Federal Technology and other organizations that link the R&D resources of that R&D activity and the Federal Government as a whole to potential users in State and local government and private industry.

4. To provide technical assistance in response to requests from State and local government officials.

5. To serve as primary representative for their activity and provide appropriate support to the Federal Laboratory Consortium for Technology Transfer.

6. To initiate contacts and maintain liaison with State and local government, and the private sector. Participate in appropriate activities of the public and private sector that provide the opportunities to achieve technology transfer objectives; e.g. local government meetings or small business conferences.

7. Assist program managers and technical department heads in identifying technologies suitable for transfer and for which application assessments need to be developed.

8. Coordinate domestic technology transfer activities with patent counsel to determine rights to tactical data, patent and licensing implications, and the commercial potential of patentable technology.

9. Ensure that no domestic technology transfer functions substantially compete with similar services available in the private sector.

10. Ensure that no domestic technology transfer functions conflict with Export Control Regulations, policies governing militarily critical technology, or any of the responsibilities and procedures for technology transfer control set forth in DoD Directives, Instructions and Manuals.

If you compare these functions with those of the Federal Laboratory Consortium functions, you will note a marked similarity of some of them. At many laboratories, the current FLC representative is the ORTA focal point. Because of their common interest, even if these functions are separate at your activity, it is imperative that the ORTA and FLC focal points work closely to achieve their common goals.

9.4. Center for the Utilization of Federal Technology

Center for the Utilization of Federal Technology
National Technical Information Service
5285 Port Royal Road
Springfield, Virginia 22161
(703) 487-4650

The Center for the Utilization of Federal Technology (CUFT) is the major focal point for all domestic technology transfer information activities. It is a part of the National Technical Information Service, and its main activities center around the **promotion** aspect of technology transfer, trying to link U.S. businesses to the technologies available within the Government.

The major things that CUFT does are (1) handle aspects of the Government-owned patent licensing and promotion program (discussed in Section 10.7 of these notes), (2) handle the Tech Notes program, and (3) publishes special directories relating to technology transfer.

The Tech Notes program of CUFT consists of gathering together all of the "single-sheet announcements" produced throughout the Government, and consolidating these into (1) a monthly *Tech Notes* publication, (2) an annual *Federal Technology Catalog*, and (3) a Federal Applied Technology Database.

The Air Force no longer contributes to this program. Therefore, the STINFO Program Manager has no duties concerning the Tech Notes (which had the acronym ANT.)

In addition to the patent and Tech Notes programs, CUFT has published four directories that you should be aware of. These are:

1. ***Directory of Federal Laboratory & Technology Resources*** - This annual directory contains summary information about 1000 laboratories and other technology resources that are part of the U.S. Government. Each summary lists the name, address, point-of-contact, and discusses the areas of expertise for that resource. Included also are subject term, resource, state, and agency indexes.

2. ***Directory of Federal & State Business Assistance*** - This directory contains information about 180 Federal and 400 State business assistance programs, including technology transfer offices.

3. ***Federal & State Contacts Involved with the Transfer of Federal Laboratory Technology*** - This directory, which is not publicly available, is a companion volume to the *Directory of Federal Laboratory & Technology Resources* mentioned above. It contains listings for all individuals who have been identified as being connected with the Federal technology transfer program. The directory is divided into seven sections containing laboratory and Federal agency contacts, Federal laboratories, laboratories by agency and State, Federal non-laboratory contacts, Federal technical information centers, and State technology transfer contacts.

4. ***Small Business Guide to Federal R&D Funding Opportunities*** - This is a guide to the Small Business Innovation Research (SBIR) Program, and a directory of the offices throughout the Government that are involved with this program and other related programs.

9.5. Federal Laboratory Consortium (FLC)

The FLC is a service organization that supports the federal technology transfer program. (In fact, its full name is the **Federal Laboratory Consortium for Technology Transfer**.) It is made up of more than 100 federal laboratories and centers from 11 federal agencies, and each of these facilities supports an FLC Technology Transfer Representatives who maintains contact with scientists and engineers from that facility. These representatives form a national network with direct access to almost all the research activity within the federal government.

The FLC was established under the Stevenson-Wydler Technology Innovation Act of 1980. The complete duties of this office were listed in that act, and are summarized in the FLC brochure. According to the FLC brochure, FLC performs the following functions:

1. Provides and disseminates information on federally owned or originated products, processes and services that have potential application to state and local governments, universities and industry.

2. Establishes person-to-person contacts between the federal laboratories and potential public and private sector users.

3. Serves as a national forum for the exchange of ideas, experiences and development of methods relating to federal technology transfer.

4. Helps to solve problems associated with intergovernmental use of federal laboratories and centers.

To perform these services, the FLC Representatives are to:

1. Identify the available resources at that facility.

2. Identify and prioritize the needs and service requests by technology users.

3. Match these needs to the available resources.

4. Hold Technology Transfer conferences whereby needs and capabilities information can be exchanged on a person-to-person basis.

The FLC is a national organization having three levels. At the national level are a Chairperson, an Executive Director, a Technical Specialty Coordinator, and a Washington Liaison. Under this level is a regional level. For the purposes of this program, the country is divided into six regions, each having an FLC Regional Coordinator. Under this level are the participating laboratory's Technology Transfer Representatives.

9.6. Cooperative R&D Agreement

Provision for cooperative research and development agreements was included in the Stevenson-Wydler Technology Innovation Act of 1980, as amended by Public Law 99-502. The provisions of this law allow a Federal laboratory to enter into a cooperative research and development agreement with any other state or national agency, any private or public firm, nonprofit organizations (including universities), and individuals. The purpose of these agreements is mainly to encourage the exploitation of Government-owned inventions made at a laboratory and other inventions of Federal employees that were assigned to the Government. However, the exploitation of a specific invention is not a necessary ingredient of a Cooperative R&D Agreement.

A very important provision of these agreements is that the laboratory may:

1. Accept, retain and use funds, personnel, and services from the collaborating party.

2. Provide personnel, services, and property to the collaborating party.

3. Grant patent licenses to the collaborating party.

4. Permit employees or former employees to commercialize inventions they made while employed by the U.S.

Where there are royalties involved, further sections of the law provide that the laboratory:

5. Distribute financial awards to the laboratory personnel for either (1) important inventions or (2) contributing to the domestic technology transfer program of the U.S.

6. Pay a minimum of 20% of any invention royalties it receives directly to the inventor.

7. Allows an employee-inventor to pursue a patent if the Government chooses not to do so.

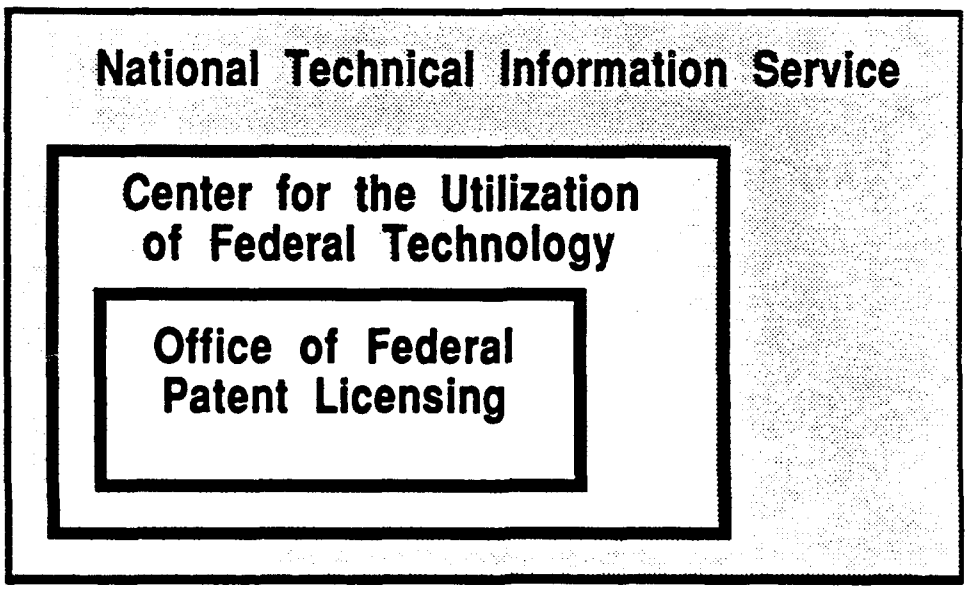
9.7. Patent Licensing

Annually, U.S. Government agencies, including the USAF, apply for and receive patents on over 1,400 inventions. These Government-owned inventions can be licensed by U.S. and foreign businesses (on either an exclusive or non-exclusive basis, and may include foreign rights) as part of the Federal technology transfer effort.

The patent licensing activities of the U.S. are handled by both (1) the defense agencies and laboratories themselves and (2) the Office of Federal Patent Licensing, which is part of the Center for the Utilization of Federal Technology (CUFT), which is part of the National Technical Information Service (NTIS).

9.7.1. The Office of Federal Patent Licensing

U.S. Department of Commerce
National Technical Information Service
Office of Federal Patent Licensing
Springfield, VA 22161
(703) 487-4733



The three main areas that will be addressed here are:

1. How a person locates Government inventions.
2. How to obtain relevant technical information on the invention.
3. What is involved in negotiating the license.

9.7.2. How to locate Government Inventions

There are a number of publications and databases available to alert businesses to new inventions. Two of these are:

1. ***Government Inventions for Licensing Abstract Newsletter*** - This is a weekly newsletter summarizing all of the Government-owned inventions that are available for licensing. It breaks down the information into eleven subject disciplines, and includes a short abstract and drawing. Subscriptions to this publication are $205 per year.

2. ***Catalog of Government Patents*** - This is an annual compilation of the patents that were announced in the weekly newsletter above. It has been published annually since 1981.

3. ***Official Gazette*** - All patents, whether Government-owned or not, are announced in the Official Gazette of the Patent and Trademark Office. This weekly booklet is a fairly common library reference item.

However, in today's online world, much of the searching for recent patents is done online. Because patents are considered technical literature, searches of common technical databases will yield citations to Government-owned patents. In particular, DoD-sponsored patents (and some patent applications) are part of the DTIC Technical Reports Database, and many patents are included in the NTIS database.

The major U.S. commercial patent databases to be aware of are the "CLAIMS" series of databases produced by the IFI/Plenum Data Company and available from DIALOG Information Services, ORBIT Search Service, and the STN International Company. These databases contain information on U.S. patents from 1950 to the present for chemical patents, and from 1963 to the present for all patents.

9.7.3. Obtaining Technical Information

Once a patent has been identified using either the above finding aids or as the result of a database search, the next step is obtaining the full patent from either the Patent and Trademark Office or a patent vendor. (Full copies of all U.S. patents are available from the U.S. Patent and Trademark Office, Washington DC 20231, for $1.50 each independent of the length of the patent.) If the invention looks promising, the person would

call the Office of Federal Patent Licensing and find out (1) what rights are still available concerning the invention, and (2) the office handling the negotiations concerning that invention's licensing. In the case of almost all Air Force patents, the person would be referred to the office discussed later in this section.

9.7.4. The Licensing Procedure

The licensing procedure can be thought of as an extension of the contracting process. If an invention has a number of parties interested in it, they will be invited to submit a plan for developing the product or process and utilizing it commercially. An applicant is then selected based on having the most advantageous, realistic, and expeditious plan. If the license is for exclusive rights to the invention, it must be published in the *Federal Register* 60 days prior to its granting.

The terms and conditions of patent licenses are a negotiated item. License agreements usually require an execution fee, annual minimum fees, and royalties based on sales resulting from the use of the invention.

9.7.5. How the Air Force Handles Patent Licensing

Air Force procedures concerning patents and patent licensing are covered in AFR 110-8, "Inventions, Patents, Copyrights, and Trademarks," and AFR 110-33, "Licensing Government-Owned Inventions in the Custody of the Department of the Air Force." Requests made through the Office of Federal Patent Licensing that concern Air Force patents are referred to:

The Chief, Patents Division
Office of the Judge Advocate General
HQ USAF/JACP
1900 Half Street, SW
Washington, DC 20324
(202) 693-5710

Under the provisions of the Stevenson-Wydler Technology Innovation Act, the individual laboratories can enter into direct patent licensing arrangements with individuals and companies. Any questions concerning this should be referred to the local Staff Judge Advocate.

Under the provisions of AFR 110-33, some of the important points concerning how the Air Force handles Patent Licensing are:

1. The types of licenses that the Air Force grants are classified as either nonexclusive, partially exclusive, or exclusive. Nonexclusive licenses usually do not involve royalties, whereas exclusive or partially exclusive licenses normally will involve royalties or other considerations to the Government.

2. The granting of exclusive or partially exclusive licenses involve a number of restrictions and conditions (such as a notice of the prospective license appearing in the Federal Register, and a 60-day delay time to process any objections,) all of which are listed in AFR 110-33.

3. The application for a patent license contains, in addition to the expected items, a detailed description of the applicant's plan for development or marketing of the invention.

4. The application will be denied if it is not in the interests of the public and Federal Government, and the granted licenses may be terminated for any breach of the license.

9.7.6. STINFO Duties Regarding Patents

Both Air Force patents and patent applications are considered STINFO and should be processed, given a Report Documentation Page, and sent to DTIC.

Your duties concerning patents are to ensure that all patents generated at your activity are processed and sent to DTIC. This will involve coordinating with the Patent Officer in the office of the Staff Judge Advocate.

10. STINFO Duties - Control and Marking

10.1. Key Points

- The STINFO Program Manager is responsible for:
  - Providing guidance to the generators of STINFO regarding the proper marking of documents.
  - Establishing a system wherein limitations are reviewed on a regular basis (or whenever a request is processed).
- A new Military Standard is under preparation with the tentative title "Marking Unclassified Sensitive Documents Prepared by or for the Department of Defense."
- Limitation is different than classification. Limitations are usually applied in order to limit the distribution of the information to a select group or exclude others from access.
- Only specific limitations can be used, and these can only be used for specific reasons.
- A procedure for the periodic review of limitations is needed in order to increase the document's availability when conditions permit in the future.
- All technical information, no matter what form it takes, must have a limitation statement.

10.2. Proper Distribution Limitation Statement

The intent of the distribution limitation system is to stem the flow of military-related technical data to our adversaries without stifling technological growth, blocking the exchange of technical data that is vital to progress or innovation, or reducing the competitiveness of U.S. industry in world markets. Properly applied, the system of limitations will keep critical technology from our adversaries but permit it to flow to government agencies and private entities that have legitimate need for it.

A proper distribution limitation statement is very important to ensure that Air Force STINFO is only released to those persons and organizations allowed access to the information, and that STINFO subject to export-control laws is identified and controlled as such.

10.3. Marking STINFO information

Responsibility

The responsibility for marking technical documents properly belongs to the DoD component that generates the document. For each new document, the manager of the technical program generating the document is responsible for checking whether or not the document should be assigned any limitation statement.

It is the responsibility of the STINFO office to assist the originating office in assigning the correct limitation (for example, by having a copy of the MCTL available for review), and then, during processing, checking that a valid and reasonable limitation has been assigned.

10.3.1. Classified Markings

The first class of document marking is classified with no additional distribution controls. When applied to a technical publication sent to DTIC, the publications are made available to anyone who is certified to receive that level of classification and who has the need-to-know in subject areas that the report falls into. In the case of contractors, certification to receive classified materials involves completion of DD Form 1541, and the need-to-know is on a contract-by-contract basis involving the submittal of DD Form 1540.

The classification of a report is determined by the content and the source of the information in the report, and is established by the manager of the program generating the information with advice from the cognizant security office.

Also, DTIC only handles materials through SECRET, and the marking of classified materials must be in accordance with AFR 205-5, "Information Security Program."

10.3.2. Limited (Classified or Unclassified)

Limited documents have distribution statements imposed by their controlling office. Such documents may be either classified or unclassified. (All classified documents must now have a limitation of some sort, therefore there is no longer a possibility of a classified and unlimited document.) Users who are affected by a limitation and who want to get access to the document must submit a limited document request form, DTIC Form 55, to DTIC. The request is validated at DTIC and forwarded to the document's controlling office for release determination.

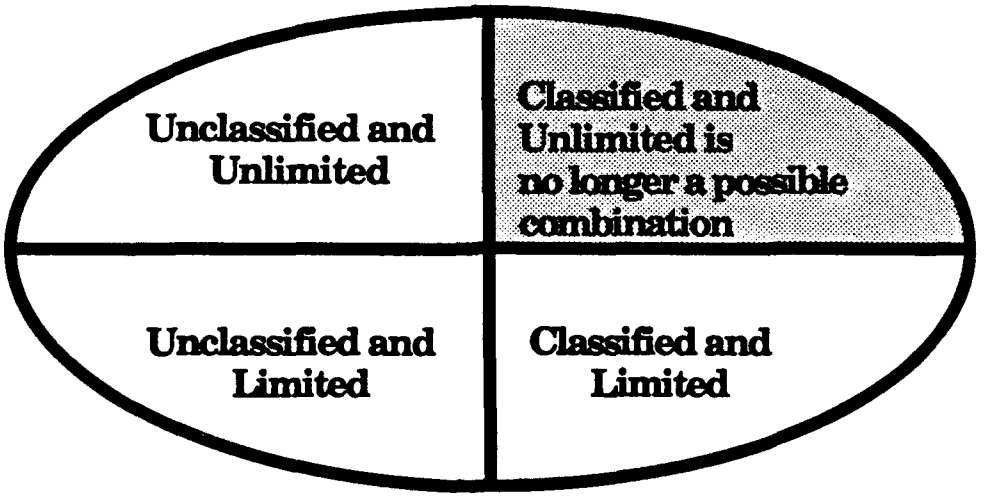
10.3.3. Export-Controlled

Because classified materials are automatically export-controlled, the category of "export-controlled" usually refers to unclassified documents that contain information subject to one or more of the export-control lists that will be discussed later. However, because classified materials are subject to automatic downgrading, classified materials may also be marked for export control to prevent their unauthorized distribution in the future. In order for a contractor to get access to these materials, the contractor must have registered with the Defense Logistic Services Center by submitting a DD Form 2345, "Export-Controlled DoD Technical Data Agreement."

Once registered, the contractor is listed on the Qualified Contract Access List, which is published quarterly by the Defense Logistics Services Center. Once DTIC receives this information, the contractor will receive unclassified, export-controlled technical data as requested.

10.3.4. Unclassified/Unlimited

The fourth category of materials is Unclassified/Unlimited, which are also referred to as "U^2" or "Statement A". These materials are distributed by DTIC to all registered users who have a deposit account with the National Technical Information Service (NTIS). They are subsequently available to the general public, without restriction, from NTIS.



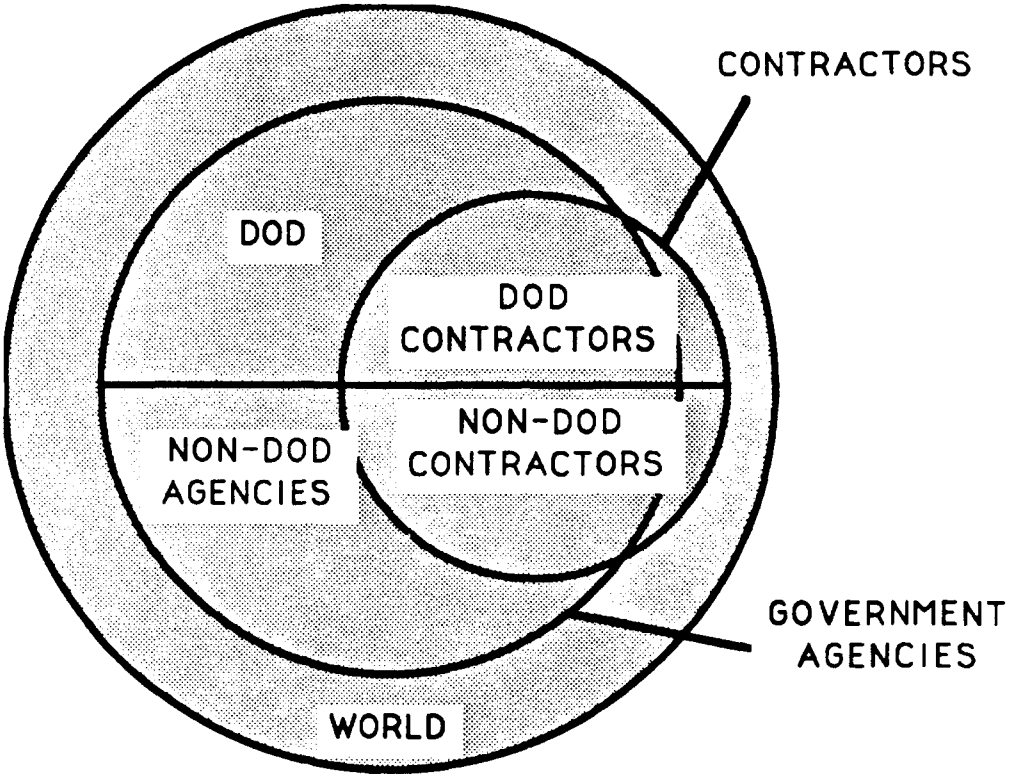
10.3.5. Distribution Statements

The distribution statement should be selected to limit the secondary distribution of the information to the intended audience. The following distribution statements are authorized for use in marking technical documents:

Distribution Statement A

Approved for public release; distribution is unlimited.

This distribution statement is used on unclassified technical documents that do not contain export-controlled data, and have been approved for public release after a security review and policy determination by the Public Affairs Office, as authorized by AFR 190-1.



(The shaded segments can receive this information.)

Distribution Statement B

Distribution authorized to U.S. Government agencies only (*fill in reason*) (*date of determination*). Other requests for this document shall be referred to (*insert controlling DoD office*).

The possible "reasons" to use in this statement are:

Foreign Government Information - limits distribution according to the desires of the foreign government that furnished the technical information.

Proprietary Information - protects information not owned by the U.S. Government and not protected by a contractor's "limited rights" statement, but received with the understanding that it not be routinely transmitted outside the U.S. Government.

Test and Evaluation - protects results of test and evaluation of commercial products or military hardware when such disclosure may cause unfair advantage or disadvantage to the manufacturer of the product.

Contractor Performance Evaluation - protects information in management reviews, records of contract performance evaluation, or other advisory documents evaluating programs of contractors.

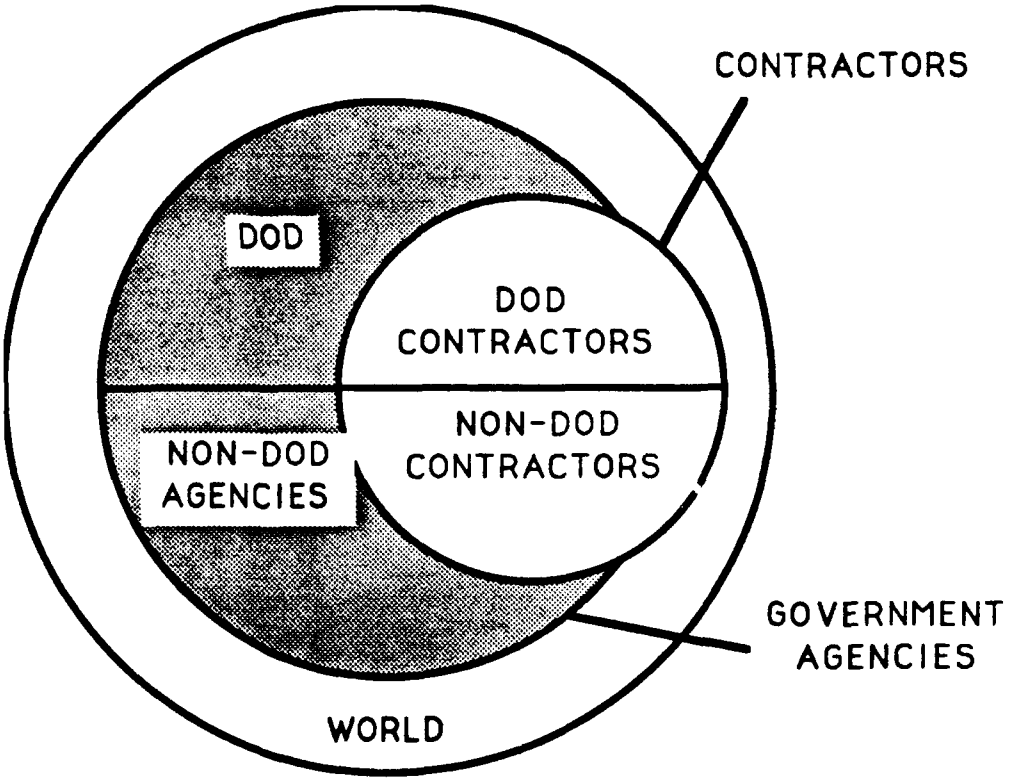
Critical Technology - protects information and technical data that advance current technology or describe new technology in an area of significant, or potentially significant military application, or that relate to a specific military deficiency of a potential adversary.

Premature Dissemination - protects information on systems or hardware in the developmental or conceptual stage to prevent premature disclosure that might jeopardize the inventor's right to obtain a patent.

Administrative or Operational Use - protects technical or operational data or information from automatic dissemination under the International Exchange Program (IEP) or by other means. This protection covers publications required solely for official use or strictly for administrative or operational purposes.

Specific Authority - protects information not specifically included in the above reasons, but which requires protection according to valid documented authority such as Executive Orders (EOs), classification guidelines, or regulatory documents.

Notes: All technical data marked with a contractor's restrictive marking claim will be marked with Distribution Statement B. Any technical document which includes particular Foreign Military Sales (FMS) item information or technology shall be marked with Distribution Statement B.



(The shaded segments can receive this information.)

Distribution Statement C

Distribution authorized to U.S. Government agencies and their contractors (*fill in reason*) (*date of determination*). Other requests for this document shall be referred to (*insert controlling DoD office*).

The possible "reasons" to use in this statement are:

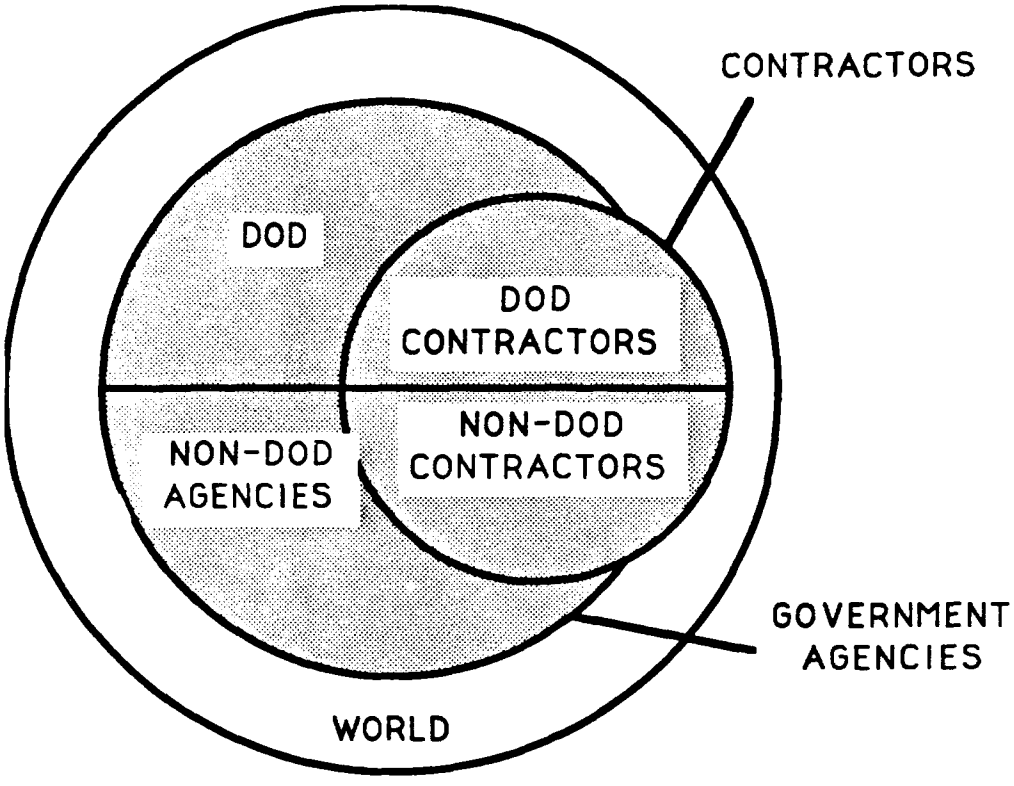
Foreign Government Information - limits distribution according to the desires of the foreign government that furnished the technical information.

Critical Technology - protects information and technical data that advance current technology or describe new technology in an area of significant, or potentially significant military application, or that relate to a specific military deficiency of a potential adversary.

Administrative or Operational Use - protects technical or operational data or information from automatic dissemination under the International Exchange Program (IEP) or by other means. This protection covers publications required solely for official use or strictly for administrative or operational purposes.

Specific Authority - protects information not specifically included in the above reasons, but which requires protection according to valid documented authority such as Executive Orders (EOs), classification guidelines, or regulatory documents.

Notes: Any technical document which contains technical information on the technologies listed as requiring control, but less than absolute control, in the MCTL, shall be marked with Distribution Statement C.



(The shaded segments can receive this information.)

Distribution Statement D

Distribution authorized to the Department of Defense and DoD contractors only (*fill in reason*) (*date of determination*). Other requests for this document shall be referred to (*insert controlling DoD office*).

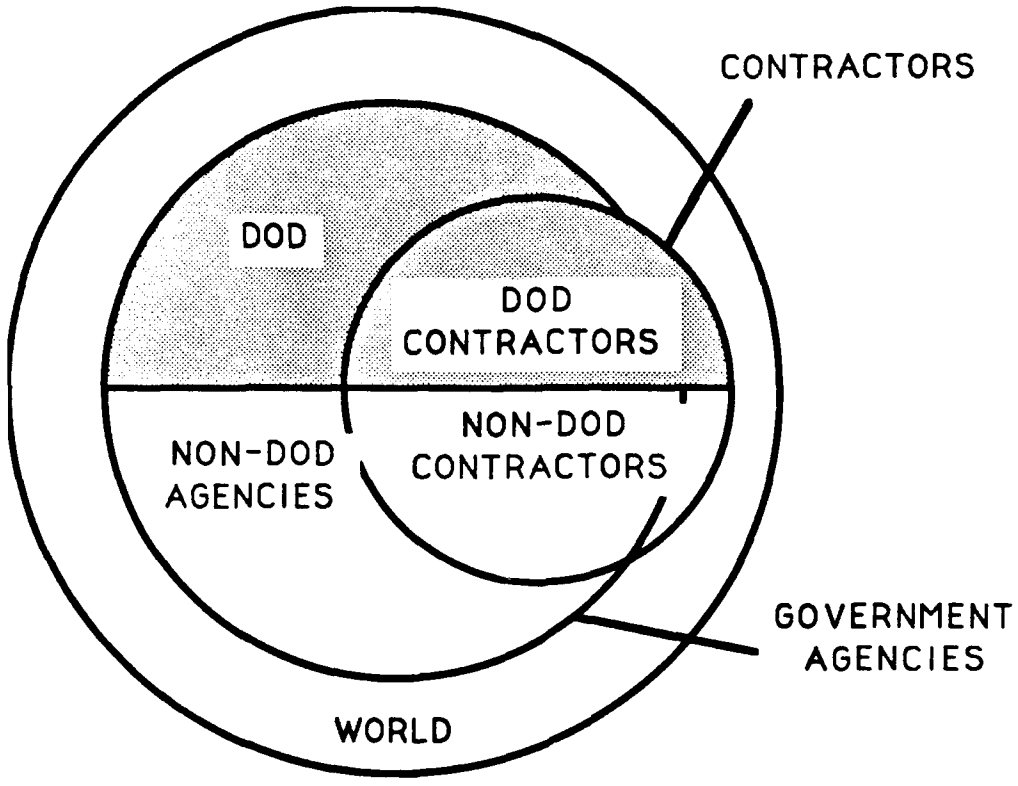
The possible "reasons" to use in this statement are:

Foreign Government Information - limits distribution according to the desires of the foreign government that furnished the technical information.

Critical Technology - protects information and technical data that advance current technology or describe new technology in an area of significant, or potentially significant military application, or that relate to a specific military deficiency of a potential adversary.

Administrative or Operational Use - protects technical or operational data or information from automatic dissemination under the International Exchange Program (IEP) or by other means. This protection covers publications required solely for official use or strictly for administrative or operational purposes.

Specific Authority - protects information not specifically included in the above reasons, but which requires protection according to valid documented authority such as Executive Orders (EOs), classification guidelines, or regulatory documents.



(The shaded segments can receive this information.)

Distribution Statement E

Distribution authorized to DoD components only (*fill in reason*) (*date of determination*). Other requests for this document shall be referred to (*insert controlling DoD office*).

The possible "reasons" to use in this statement are:

Direct Military Support - protects technologies of such significance for military purposes that release may jeopardize an important technological or operational military advantage for the U.S., as designated by the DoD, or in those cases where a specific decision is made by the program office responsible for the project that only DoD components should have access to the document.

Foreign Government Information - limits distribution according to the desires of the foreign government that furnished the technical information.

Proprietary Information - protects information not owned by the U.S. Government and protected by a contractor's "limited rights" statement, or received with the understanding that it not be routinely transmitted outside the U.S. Government.

Test and Evaluation - protects results of test and evaluation of commercial products or military hardware when such disclosure may cause unfair advantage or disadvantage to the manufacturer of the product.

Contractor Performance Evaluation - protects information in management reviews, records of contract performance evaluation, or other advisory documents evaluating programs of contractors.

Critical Technology - protects information and technical data that advance current technology or describe new technology in an area of significant, or potentially significant military application, or that relate to a specific military deficiency of a potential adversary.

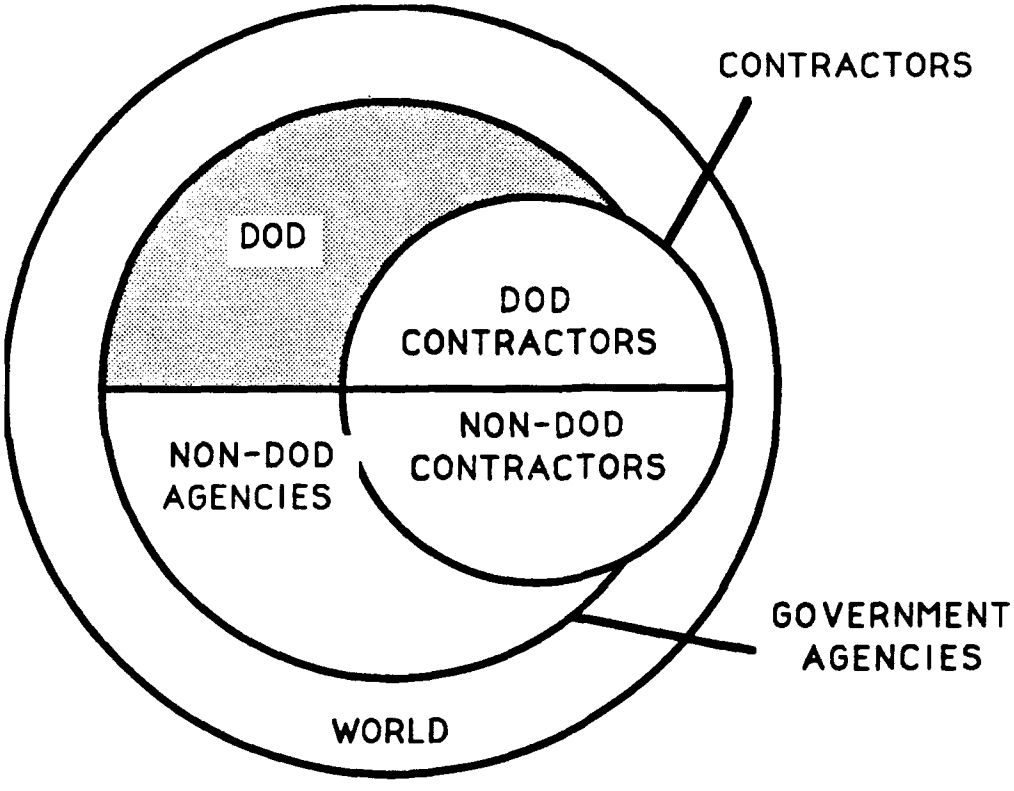
Premature Dissemination - protects information on systems or hardware in the developmental or conceptual stage to prevent premature disclosure that might jeopardize the inventor's right to obtain a patent.

Software Documentation - protects software documentation and data releasable only under AFR 300-6.

Administrative or Operational Use - protects technical or operational data or information from automatic dissemination under the International Exchange Program (IEP) or by other means. This protection covers publications required solely for official use or strictly for administrative or operational purposes.

Specific Authority - protects information not specifically included in the above reasons, but which requires protection according to valid documented authority such as Executive Orders (EOs), classification guidelines, or regulatory documents.

Notes: Any technical document which contains technical information on the technologies listed as requiring absolute control in the MCTL shall be marked with Distribution Statement E. Deficiency reporting data, and Accident Investigation Information will be marked with Distribution Statement E.



(The shaded segments can receive this information.)

Distribution Statement F

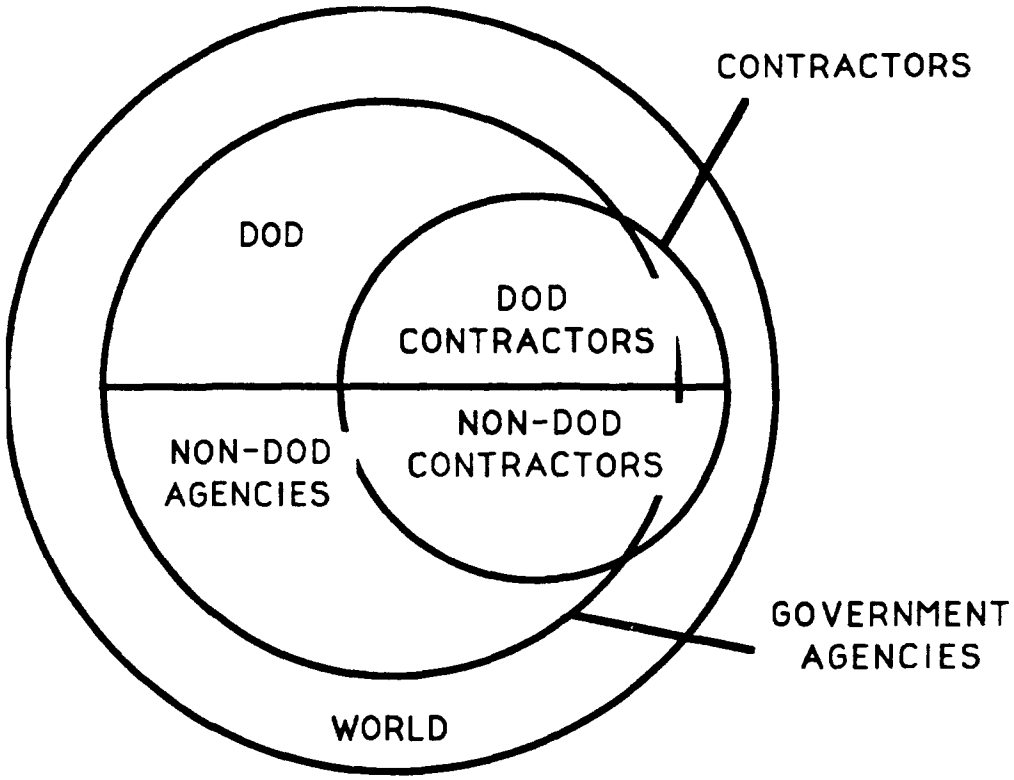
Further distribution only as directed by (*insert controlling DoD office*) (*date of determination*) or higher DoD authority.

The possible "reasons" to use in this statement are:

Direct Military Support - protects data so militarily significant that its release for purposes other than direct support of the USAF or other DoD activities may jeopardize an important U.S. technological or operational advantage. This type of technical data provides a significant military capability, has little or no current commercial usefulness, and its development for commercial purposes would jeopardize the military advantage it provides. Data marked with Distribution Statement F and this reason is usually only released to permit the requester to bid or perform on a contract with the USAF or other U.S. Government Agency.

Special Dissemination and Reproduction - protects information subject to special dissemination limitations specified by paragraph 4-505, DoD Regulation 5200.1-R.

Notes: Distribution Statement F usually is used only on classified technical documents, but may be used on unclassified technical documents when specific authority exists.

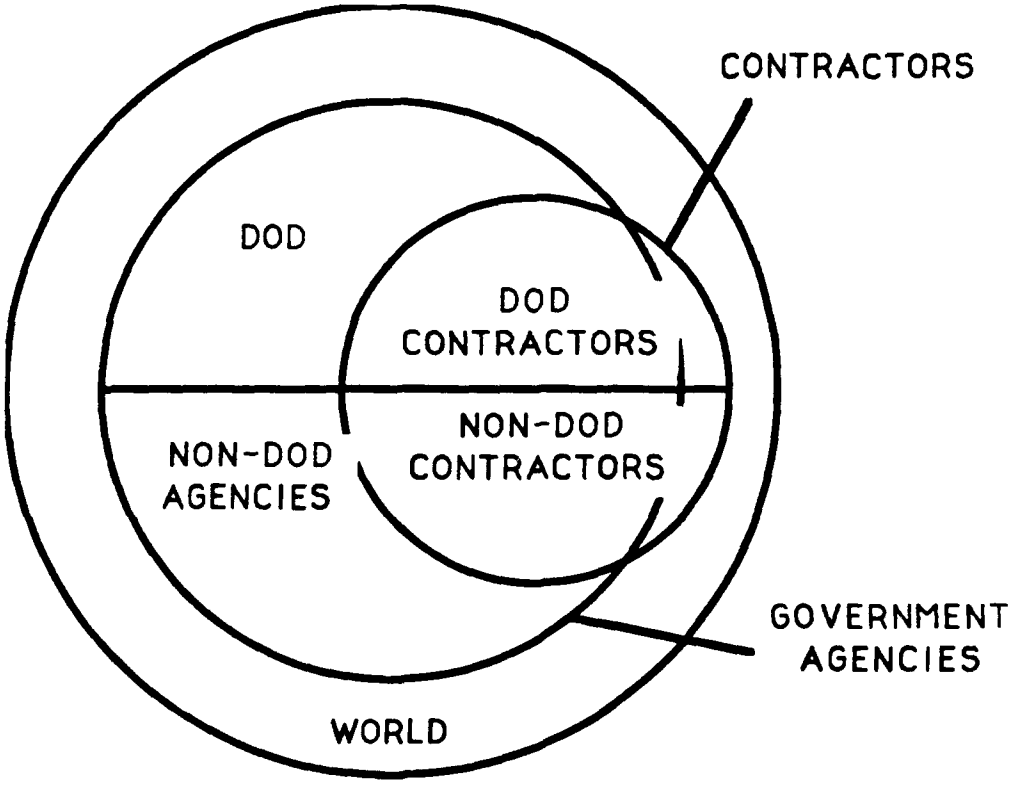


This is the most restrictive limitation with each distribution being controlled.

Distribution Statement X

Distribution authorized to U.S. Government agencies and private individuals or enterprises eligible to obtain export-controlled technical data in accordance with regulations implementing 10 U.S.C. 140c (*date of determination*). Other requests must be referred to (*insert controlling DoD office*).

Export-Controlled Data - protects data subject to DoD Directive 5230.25, when distribution statements B, C, D, E, or F are not used. Note that Distribution Statement X is never used on classified documents.



Eligibility to receive this information is determined by the ability to receive Export-Controlled information.

10.3.6. Control of Unclassified Technology with Military Applications

DoD Directive 5230.25 established policies and procedures for disseminating and withholding unclassified technical data. AFR 80-34, "***Withholding of Unclassified Technical Data From Public Disclosure***" implements this Directive within the Air Force.

Essentially, the Air Force may withhold from public disclosure any technical data with military or space application in the possession of, or under the control of, the U.S. Air Force if such data may not be exported lawfully without an approval, authorization, or license under export-control law.

It is Air Force policy to provide this data to contractors certified and registered by the Defense Logistics Services Center. However, when the data is so important that release for purposes other than direct support of the Air Force or other DoD activities may jeopardize an important U.S. technological or operational advantage, the data will be withheld even from registered contractors.

The two document request channels that AFR 80-34 addresses are non-FOIA requests and FOIA requests. The regulation lists the situations and reasons for which access should be denied in both these situations, as well as a number of sample letters to cover the more common situations.

10.3.7. Placing Limitations and Export Control Markings on Technical Documents and Other Forms of STINFO

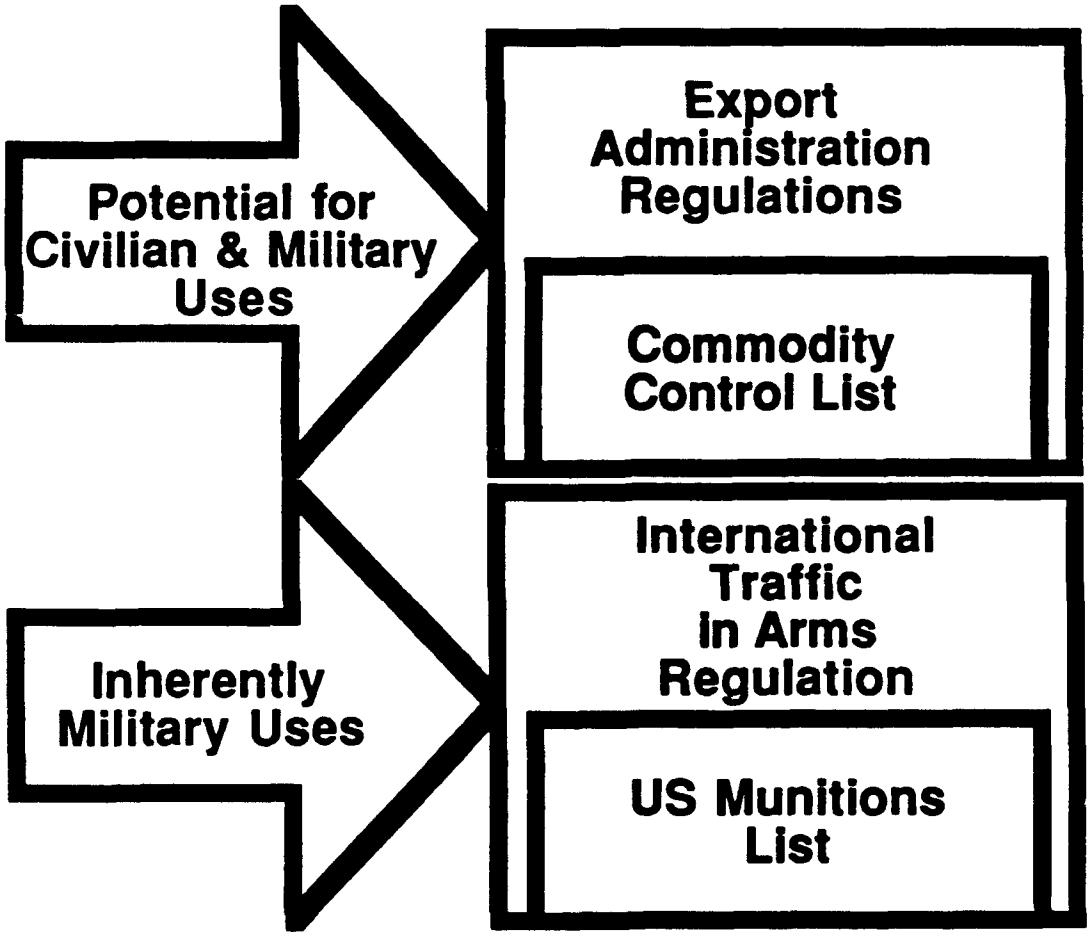
The new distribution marking system mandates the use of the following warning notice on all documents that contain export-controlled technical data:

WARNING - This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec. 2751 et seq.) or the Export Admistration Act of 1979, as amended (Title 50, U.S.C., APP. 2401, et seq.). Violators of these export laws are subject to severe criminal penalties. Disseminate in accordance with the provisions of AFR 80-34.

All other categories of materials including hardware, charts, maps, drawings, photographs, films, recordings, transparencies, slides, motion picture films, recordings, microforms, and all types of ADP media also need to be marked. Detailed marking instructions will be contained in the new MIL-STD entitled "***Marking Unclassified Sensitive Technical Documents Prepared by or for the Department of Defense***" which is in preparation.

10.4. Export Control

All defense goods and technical data that are subject to export control fall either within the International Traffic-in-Arms Regulation (ITAR) or the Export Administration Regulations (EAR). The criteria as to whether the item comes under one or the other is a function of its inherent capabilities. If the item is deemed to be inherently military in character, it falls under the ITAR. If the item has potential for both military and civilian use, it falls under the EAR.



10.4.1. International Traffic-in-Arms Regulation (ITAR) (22 CFR 120)

The ITAR prohibits the export and import of defense articles and defense services without the approval of the Department of State. "defense article" means anything included on the U.S. Munitions List (see next section) and includes models, mockups, and other such items which reveal technical data directly relating to the items in the U. S. Munitions List. "Defense services" means assisting (including training) foreign persons in the design, engineering, development, processing, manufacture, use, operation, ..., of defense articles or the furnishing to foreign persons of any technical data, whether in the United States or abroad.

According to the ITAR, technical data is defined as:

a. Information relating to defense articles and services;

b. Information covered by an invention secrecy order;

c. Information which is directly related to the design, engineering, development, production, processing, manufacture, use, operation, overhaul, repair, maintenance, modification, or reconstruction of defense articles. This includes, for example, information in the form of blueprints, drawings, photographs, plans, instructions, computer software and documentation. This also includes information which advances the state of the art of articles on the U.S. Munitions List. It does not include information concerning general scientific, mathematical or engineering principles.

Note that this definition of technical data is very broad and covers all technology which may relate to items on the U.S. Munitions List. If there is any question at all as to whether or not an item is on the U.S. Munitions List, the Office of Munitions Control, Bureau of Politico-Military Affairs, Department of State, Washington, DC 20520, will make such a determination. (Procedures are outlined in 22 CFR Part 120.)

What the ITAR Contains

Basically the ITAR contains four things:

a. General information on the ITAR itself.

b. The U.S. Munitions List.

c. Registration procedures for exporters and manufacturers, and license procedures for exporting the controlled materials.

d. The penalties for violation of these regulations.

10.4.2. U.S. Munitions List (22 CFR Part 121)

The U.S. Munitions List is part (in fact it is the heart) of the ITAR. It is a subject-organized list of defense equipment and topics, and is about 7 pages long. Some items on this list are marked (by an asterisk) to indicate that they are "significant military equipment" and subject to even more stringent controls (dealing with non-transfer and use.) Changes in the list (and clarifications) are issued through the *Federal Register* and through a *Munitions Control Newsletter* published by the Office of Munitions Control.

The List is quite specific concerning military hardware such as "underwater sound equipment, including but not limited to towed arrays, electronic beam forming sonar, ..." However, sprinkled liberally throughout the list is the phrase "but not limited to ..." This legalese means that items not specifically on the list (but are of the same type as items on the list) probably are subject to the same controls as items on the list.

10.4.3. Export Administration Regulations (EAR) (15 CFR Parts 369-399)

Export Control Laws are the responsibility of the Department of Commerce, and were established to provide export control policies and practices. A validated license is required from the Department of Commerce for not only the export of materials, but the export of technical data relating to the controlled materials.

Technical data is defined as information of any kind that can be used in the design, production, manufacture, utilization, or reconstruction of articles or materials. The data controlled consists of not just reports, but may take on the form of a model, prototype, blueprint, or operating manual. All software is considered technical data.

Basically, the technical data relating to the commodities as listed on the Commodity Control List (CCL) are prohibited without a license.

Country Groups

For the purposes of export control, the foreign countries are separated into seven country groups designated by the letters Q, S, T, V,W, Y, and Z. The specific controls are then applied to a specific country group.

Note that Canada is not in any group and is mentioned by name in the EAR, and that many countries are listed in Group V. (Note that the following list is quite dynamic and subject to frequent changes. In order to determine the precise list at any point in time, you would have to refer to both 15 CFR Part 370, and the *Federal Register's* List of CFR Sections Affected).

Country Group Q: Romainia.

Country Group S: Libya.

Country Group T: Greenland, Miquelon and St. Pierre Island, Mexico, Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panama, Bahamas, Barbados, Bermuda, Dominican Republic, French West Indies, Haiti, Jamaica, Leeward and Windward Islands, Netherlands Antilles, Trinidad and Tobago, Colombia, French Guiana, Guyana, Surinam, Venezuela, Bolivia, Chile, Ecuador, Peru, Argentina, Brazil, Falkland Islands, Paraguay, Uruguay.

Country Group V: All countries not included in any other country group (except Canada.)

Country Group W: Hungary, Poland.

Country Group Y: Albania, Bulgaria, Czechoslovia, Estonia, German Democratic Republic, Laos, Latvia, Lithuania, Mongolian People's Republic, Union of Soviet Socialist Republics.

Country Group Z: North Korea, Vietnam, Cambodia, Cuba.

10.4.4. Militarily Critical Technology List (MCTL)

The Militarily Critical Technology List (MCTL) was developed by the DoD to identify those technologies whose export could increase the military capabilities of potential adversaries to the detriment of U.S. national security.

The MCTL is not intended to replace either the Export Administration Regulations nor the International Traffic-in-Arms Regulations. Rather, it should be used as a resource document (background information) in determining which technologies must be controlled from foreign export. The contents of the MCTL do impact both the Commodity Control List (CCL) and the U.S. Munitions List.

10.4.5. Commodity Control List (CCL) (15 CFR Part 399)

The CCL is a detailed listing prepared by the Department of Commerce to control the export of goods and technologies which may significantly contribute to the military potential of foreign countries thereby

adversely affecting the national security of the U.S. The CCL is contained in 15 CFR Part 399, and is about 200 pages long.

The CCL is broken into 9 commodity groups (such as Group 0: Metal-Working Machinery), and each entry within the groups is given a four-digit Export Control Commodity Number. For each entry, the CCL contains information as which Country Groups need a special license, the value over which a special license is needed, and the reason for control. Looking over the list, many of the "reason for control" entries is simply "National security." There is also a "processing code" which is used by exporters to indicate country groups.

The major groupings of commodities listed in the CCL are:

Group	Types of Commodities
0	Metal-Working Machinery
1	Chemical and petroleum equipment
2	Electrical and power-engineering equipment
3	General industrial equipment
4	Transportation equipment
5	Electronics and precision equipment
6	Metals, minerals, and their manufacture
7	Chemicals, metalloids, petroleum products
8	Rubber and rubber products
9	Miscellaneous

10.4.6. Coordinating Committee (COCOM)

The COCOM is a multilateral organization that cooperated in restricting strategic exports to controlled countries. It consists of 15 member nations: Belgium, Canada, Denmark, France, the Federal Republic of Germany, Greece, Italy, Japan, Luxembourg, the Netherlands, Norway, Portugal, Spain, Turkey, the United Kingdom, and the United States.

This committee is important because the CCL contents and structure are determined by the COCOM.

10.4.7. Qualified Contractor Access List, Defense Logistics Service Center Certification

The DoD has established a system that accommodates transfer of export-controlled DoD technical data to persons or companies in the U.S. while retaining the protections afforded by national export control laws. This data, however, is provided under a binding agreement and therefore is not a public disclosure. The system, established in the new DoD Directive

(5230.25) includes a process for certifying those who need access and outlines procedures for obtaining the data required.

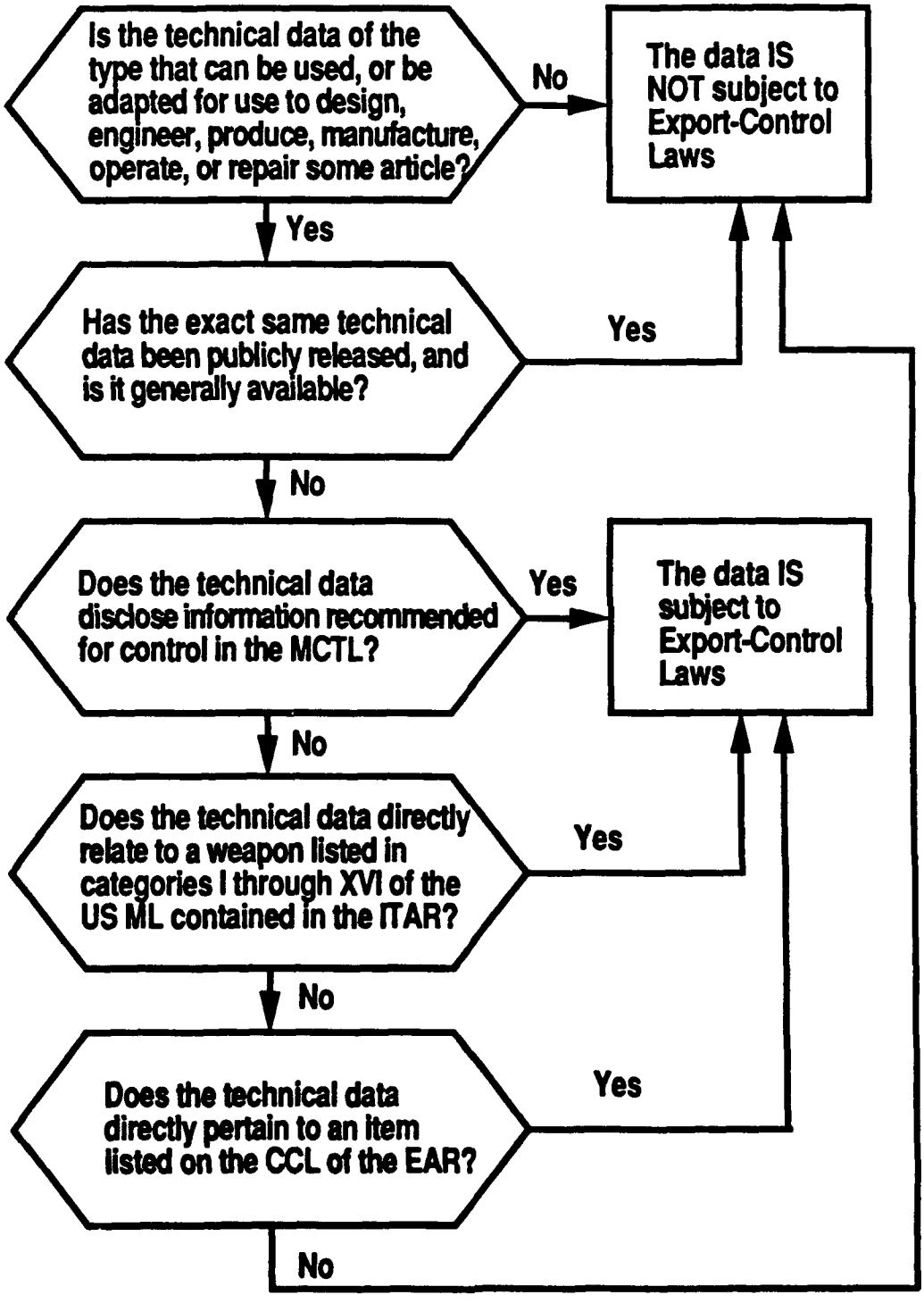
Certification is accomplished using DD Form 2345, called an "Export-Controlled DoD Technical Data Agreement." The Form is in effect a self-certification that the applicant will use the data only in ways that will maintain the protections afforded by U.S. export control laws.

The Defense Logistics Agency has overall responsibility for administering the certification system, and the Defense Logistics Services Center, located in Battle Creek, Michigan, carries out the operational functions. It collects the certifications and maintains them in a database. The Center also disseminates a list of contractors eligible for access to export-controlled DoD data. This list, which is published quarterly, is called the ***Qualified Contractor Access List (QCAL)***

Companies that are certified are assigned a certification number and are eligible to receive export-controlled DoD data for a renewable five year period.

The pamphlet DoD 5230.25-PH is highly recommended for an in-depth discussion of the ins and outs of this process.

10.4.8. Procedure for Determining if Technical Data is Export Controlled (based on Section 5 of AFP 80-30)



11. STINFO Duties - User Support

11.1. Key Points

- It is the STINFO Program Manager's responsibility to set up procedures to obtain scientific and technical information services to meet the needs of the organization.
- In order to do this, you must be knowledgeable about:
  - The technical activities at your organization.
  - The perceived information needs of your technical user community.
  - The services being currently provided.
  - The available information services that could be provided.
- The single most important user service is access to DTIC databases and services.
- Other user support services that might apply to your organization are:
  - Access to CIRC II for foreign technology.
  - Access to commercial databases.
  - Access to IR&D brochures and evaluations.
  - Support of sponsored technical meetings.
  - Access to GIDEP for engineering data.
- Ensuring that the technical community is being adequately trained as to what is available and how to access it.

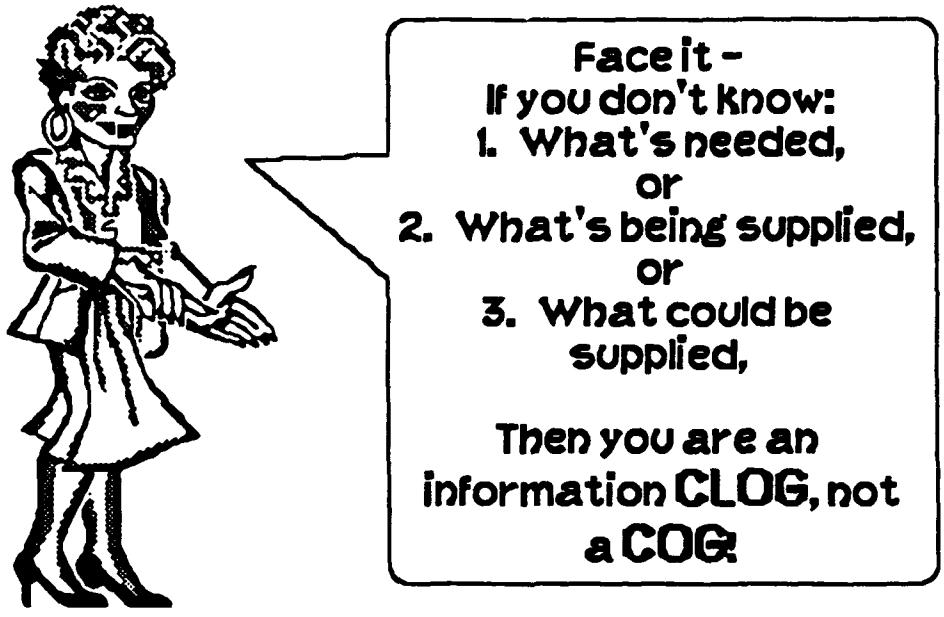
11.2. User Support Duties

STINFO duties pertain to scientific and technical information flow not just out from an organization, but also **into** an organization in the form of support of the technical community's information needs. In fact, the first STINFO duty listed in AFR 83-1 is to set up procedures to provide or obtain scientific and technical information services to meet the needs of the organization.

It may sound simplistic, but before you can address supplying user information needs, you must know (1) what the users feel they need, (2) how these needs are or are not being currently met, and (3) what information services are available to support your user population. Two "truisms" that you can observe for yourself are that (1) most users know very little about what information services are available to them, and (2) most information support people don't really know what their user population needs.

This section deals with the most fundamental user support services which, if appropriate at your activity, should be provided and promoted. (It is not enough is simply provide access to an information service. For example, libraries have provided access to commercial database services for years. But, mainly due to ineffective promotion, only a small fraction of the technical user community is aware that they have access to these services.)

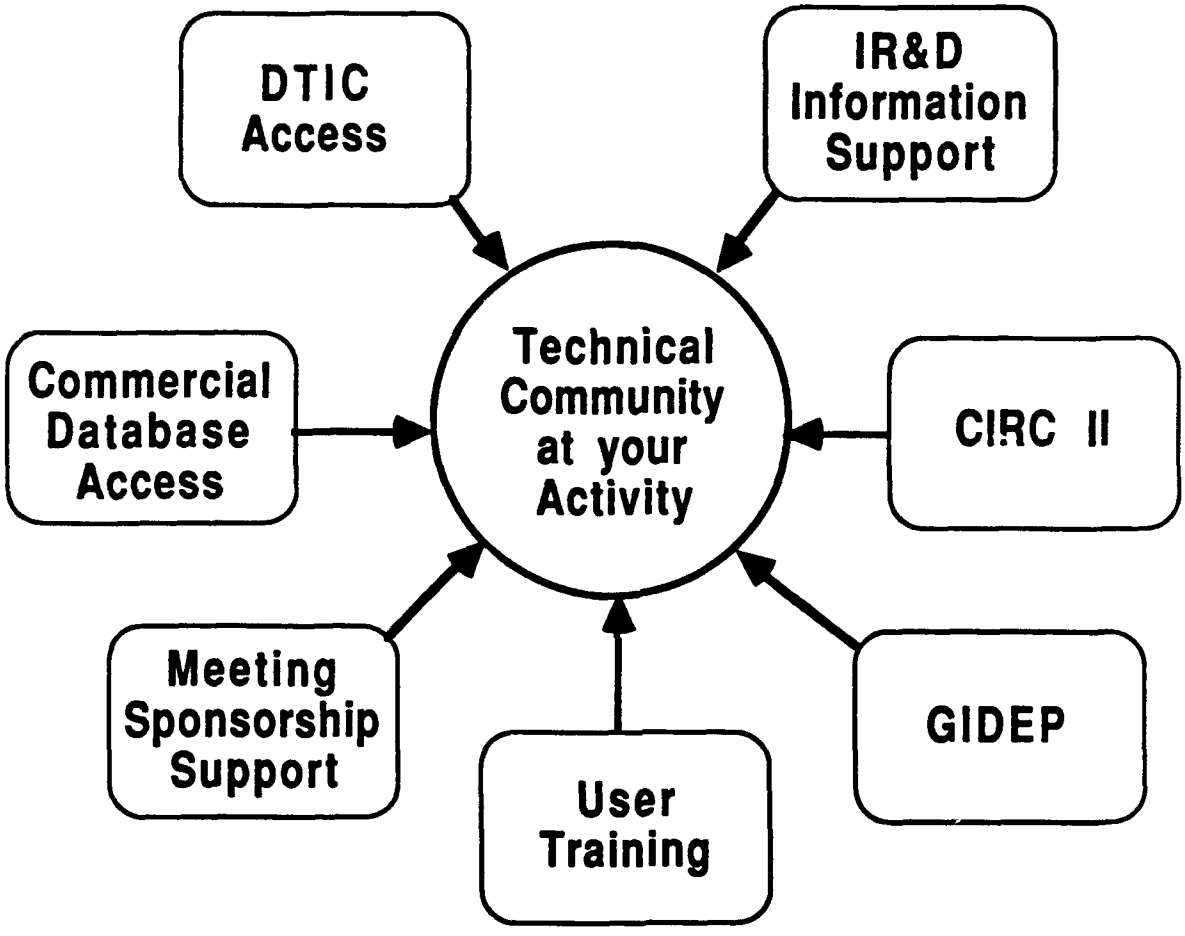
It is your responsibility to (1) be knowledgeable about the local projects and other technical involvements of your organization, (2) be knowledgeable about the perceived information support needs of the user community, (3) be knowledgeable about all the current information services being provided, (4) be aware of the information services of potential benefit to your organization, and (5) then set up procedures to provide or obtain scientific and technical information services to meet the needs of the organization.



Some of the most important of the information services that you should be aware of are discussed in this section. Keep in mind that this list is not complete and that it is a list that you are (or at least should be) in the best position to make for your activity.

The services user support services that are discussed in this section are:

1. Defense Technical Information Center (DTIC) -
2. Foreign Technology Access (CIRC II)
3. Commercial tabases
4. IR&D Responsibilities
5. Technical Meetings
6. Government Industry Information Exchange (GIDEP)
7. Information Support Training



SOME POTENTIAL USER SUPPORT SERVICES

11.3. Defense Technical Information Center (DTIC)

Defense Technical Information Center
Building 5, Cameron Station
Alexandria, VA 22304-6145
(202) 274-6434, Autovon 284-6434

11.3.1. What DTIC Is

DTIC is the central point within the DoD for acquiring, storing, retrieving, and disseminating scientific and technical information to support the management and conduct of DoD research, development, engineering and studies programs. DTIC's governing regulation is DoD Directive 3200.12, *DoD Scientific and Technical Information Program*, and it is under the operational control of the Defense Logistics Agency (DLA).

The Air Force policies, responsibilities, and support procedures regarding DTIC are specified in AF Regulation 80-44.

11.3.2. DTIC Databases

DTIC maintains four major databases. These databases are:

1. The **Technical Report (TR) Database** is a collection of bibliographic citations to documents in the reports collection. All citations are to documents which have been assigned an AD number. The bibliographic information in the file is essentially the information reported on SF 298 (previously DTIC Form 1473), *Report Documentation Page*, that is included in each report sent to DTIC.

2. The **R&T Work Unit Information System (WUIS) Database** is a collection of information about all the ongoing (and many of the past) DoD work units.

3. The **Independent Research and Development (IR&D) Database** contains descriptions of technical programs which are initiated and performed by DoD contractors and are not wholly funded by DoD. IR&D records are considered proprietary information and are exempt from disclosure under the FOIA. IR&D information is available to DoD engineers and scientists.

4. The **Program Element Summary (PEDS) Database** consists of summary descriptions of proposed programs and project-level RDT&E efforts. This database originally consisted of information taken from the now-defunct DD Form 1634. Currently, the information being collected is

coming from the Congressional Program Element Descriptive Summaries. (This database is just being formed and is currently incomplete Also it is being implemented as part of the WUIS database and is not available to contractors.)

"DTIC is the single most important information service for defense engineers and scientists to be aware of."

11.3.3. DTIC Services

Some of the more important services that DTIC provides are:

1. **Archiving and secondary distribution of technical publications.**

One of DTIC's major functions is to collect and archive technical publications. Their technical reports collection alone contains around 1.5 million documents, and because all documents distributed by DTIC are either microform blow-backs or microform copies, no document ever goes "out-of-print."

As the official secondary distribution channel for technical publications within the DoD, DTIC provides a rapid and effective means for DoD employees and contractors to obtain copies of reports that have already had a primary distribution by the generating organization.

2. **Announcement of new technical publications via the Technical Reports Awareness Circular (TRAC).**

The TRAC is a monthly publication of DTIC's that announces the availability of technical reports acquired by DTIC and added to the TR database. It is an unclassified, limited publication, and contains entries for all new citations. It also contains five indexes: Corporate Author - Monitoring Agency, Title, Personal Author, Contract, and Report Number.

3. Automatic document distribution via the ADD Program.

Under the Automatic Document Distribution (ADD) Program, users (such as your organization) can establish an interest profile and receive on a regular two-week basis, microfiche copies of newly acquired reports which match those interests .

Any local documents collection that supports your user community should be using the ADD program to build the collection with relevant materials.

4. Online access to its major databases via the DROLS system. And, "demand bibliographies" for any organization not having DROLS access.

The Defense RDT&E Online System (DROLS) links remote terminals to DTIC's central computer at Cameron Station. Users of this system can query the major DTIC databases to answer specific questions and to generate custom bibliographies on a specific topic.

Access to DROLS is either via any microcomputer or terminal equipped with a modem, or via dedicated lines to terminals equipped with cryptographic equipment for classified service. (Although a lot of classified material is in the DTIC collection, only a very small fraction of these documents have either a classified abstract or classified title. Therefore, dedicated access is not, in most cases, really needed and can seldom be justified in terms of the added expense and inconvenience. This is especially true since classified bibliographies can be requested online from an unclassified terminal, and the results send directly from DTIC to the requestor in a very short time.)

By using DROLS, the standard bibliographic fields such as author, source, keywords, etc. can be used as search terms to generate lists of citations meeting the search criteria. These searches can be made in any of the available databases including the TR, WUIS, and IR&D databases.

Once a search has been performed and refined to the point of getting useful information, the outputs can be either examined onscreen, downloaded and printed out at the terminal, or printed offline and sent to the requestor the next day. Usually the decision is a function of the size of the output and how much of a hurry the requestor is in.

DTIC provides a lot of support documentation and training for the use of their system, and because the DROLS search language is a relic of the computer dark ages, this training is necessary. (DROLS is definitely not user-friendly!) Also, the response time of the service can be frustrating at times (especially just after lunch EST when both Coasts are awake and kicking.)

5. Custom, automatically generated bibliographies via the Current Awareness Bibliography CAB Program. (Available for the technical reports database.)

The CAB program is a customized, automated bibliography based on a subject profile of a specific user. Every 2 weeks, the user's subject interest profile is matched against information contained in newly accessioned technical reports. A paper document containing the citations which match the user's profile is then sent to the subscriber automatically.

This is a very powerful service. However, the drawback to the CAB and similar services is that user interests change over time. If a mechanism isn't implemented to update these profiles on a regular basis, the user profile will slowly drift out of relevancy and into the trash can.

6. Shared Bibliographic Input Network (SBIN).

This is a service whereby a user organization can use DTIC's computer facilities and TR file to "tag" locally held reports with their DTIC-assigned holding symbol. In addition, bibliographic information about any locally-held reports not held by DTIC would also be input and tagged.

By using the SBIN, users can theoretically skip having any local index file to the technical reports in their documents collection. In exchange, DTIC finds out about reports not in its collection. Initially, any records not in the database are assigned an accession number in the AD-E and AD-F range, and are not available for ordering. In the future these will become regular AD numbers and would be available for ordering.

7. Referral database of defense organizations containing information such as their fields of expertise, etc.

DTIC maintains a referral database of information on S&T government-sponsored activities with the capability and willingness to serve the defense community in their field of expertise. The most fundamental type of search would be to identify RDT&E activities with expertise in a particular technical area.

This database is not online, but will be searched if requested by telephone or by letter. In addition, the database is printed out regularly and issued as an unclassified paper document. The latest edition is AD-A138 400, ***DTIC Referral Data Bank Directory***.

8. A listing of many important DoD databases in the DoD Database of Databases.

An evolving project at DTIC that you should be aware of is the compilation of a directory of DoD R&D databases. This directory and database will serve as a unified reference to all R&D databases within the DoD. This worthwhile project has been ongoing for a couple of years, and

should be supported. A printed version of the database is available as AD-B116 400.

9. Common access to all Government database collections via SearchMaestro and the Intelligent Gateway project.

Another evolving project at DTIC to be aware of is the Intelligent Gateway project. The idea of a gateway (of which there are a small number) is to provide a single telephone number, password, bill, and search language into a number of databases. These services have evolved to the point that you can use your charge card to access 800+ comercial databases without any initial signup or instruction necessary!

The Intelligent Gateway provides access to the DOE and NASA collections of databases, in addition to the DoD databases. It also provides an electronic mail capability, a means to access the commercial databases (if you have an account already established), and access to some other minor databases.

10. Maintenance of *How to Get It.*

One of the most important reference books available to anyone dealing with defense information is ***How to Get It,*** AD A201 600.This book lists, for all types of defense publications, (1) what the publication is and who generated it, (2) where it is indexed or listed, and (3) how to get copies of titles in the series.

11.3.4. Recertification

The process whereby U.S. Government activities and contractors obtain access to DTIC services is called "certification." Contractor access remains in effect for the period authorized by the contract monitor. Individuals and contracts gaining access via the Potential Contractor Program remain certified for a period of three years. All other U.S. Government users must recertify annually.

Although this annual recertification may seem like bureaucratic excess, you are responsible for being sure that it is carried out and that DTIC services are not interrupted. (A miscellaneous suggestion of the AFMAG was that the annual recertification be turned into a three year or longer period.)

11.3.5. Relationship Between the STINFO Program Manager and DTIC

The STINFO Program Manager is responsible for setting up procedures to obtain technical information services from DTIC (AFR 83-1). In addition to this specific function, there are many other situations in which the STINFO Program Manager will have contact with DTIC. One of

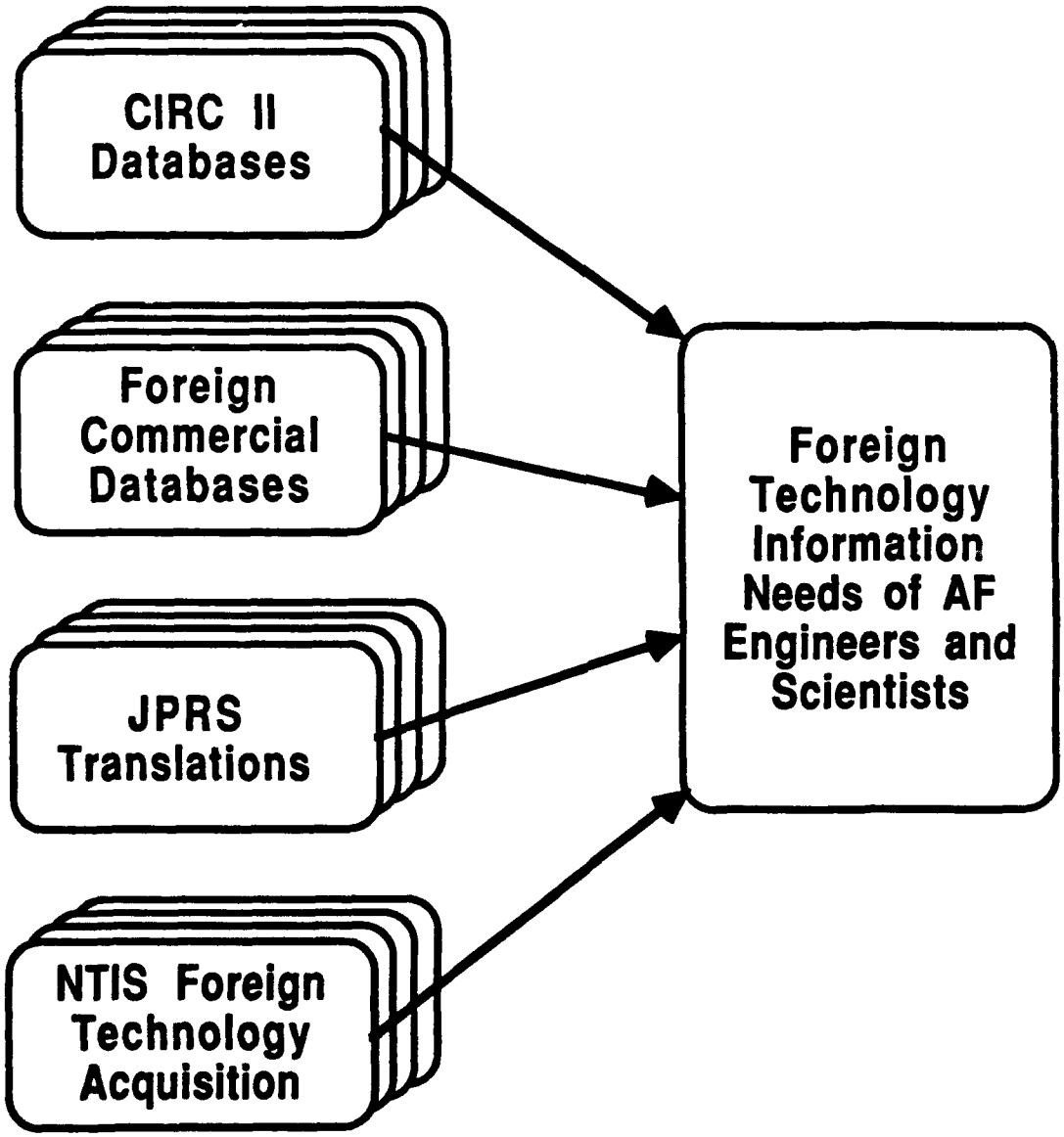
these situations will be in the processing of certain forms discussed elsewhere in this notebook. In particular, it is the STINFO Program Manager duty to manage the processing of Standard Form 298, "Report Documentation Page", DTIC Form 50, "DTIC Accession Notice", DTIC Form 55, "Request for Limited Document", FL Form 88, "Request for Scientific and Technical Reports", and DD Form 1540, "Registration for Scientific and Technical Information Services".

11.3.6. DTIC Miscellaneous

In the past, DTIC has informally reviewed the subject classification on all incoming documents. When the markings of a document are challenged, the document, along with an explanation, were returned to the originator. Because of an increased workload, DTIC will probably not be continuing this service in the future in the same form.

11.4. Foreign Technology

The sixth STINFO Program Manager duty listed in AFR 83-1 is to "Maintain close liaison with Air Force foreign technology specialists to ensure that foreign research results are available to Air Force scientists, engineers, and managers." Fortunately, because of (1) the Central Information Reference and Control (CIRC II) system, (2) the CIA's Joint Publication Research Service, (3) the NTIS role in foreign S&T, and (4) foreign technology databases, fulfilling this duty will be easier than you might expect.



11.4.1. CIRC II

The CIRC II system is the national system for the processing, storing, retrieval, and dissemination of foreign scientific and technical written word intelligence information. It is run by the Air Force Foreign Technology Division (FTD) as part of the Scientific and Technical Intelligence Information Service Program (STIISP) of the Defense Intelligence Agency. The contact for information about CIRC II is:

CIRC II Monitor
FTD/SIOO
Foreign Technology Division
Wright Patterson AFB, OH 45433-6508
(513) 257-2533, Autovon 787-2533

The CIRC II system has two functions. First, it supports the mission of the five service-related production agencies. In addition to FTC, these include the Army Foreign Science and Technology Center, the Army Missile Intelligence Agency, the Armed Forces Medical Intelligence Center, and the Naval Intelligence Support Center. Second, CIRC II supports all Government-sponsored research and development agencies.

The CIRC II system is quite large, containing (as of November, 1985) citations to approximately 9 million S&T document references in 12 S&T databases and 6 million references in about 14 support databases. The S&T databases contain document citations with a variety of classifications, and the support databases contain cross-references to personalities, facilities, locations, nomenclatures, translations, etc.

Your responsibility concerning this system is to determine if there is any need for ongoing access to it at your activity, and if such a need exists, obtain access. Then, you should promote the service to ensure that every technical person with a potential need for it is aware of its existence and is aware of the procedures to make use of the service.

11.4.2. Joint Publications Research Service (JPRS)

The Joint Publications Research Service (JPRS), 1000 N.Glebe Road, Arlington, VA 22201, translates and abstracts foreign language technical and political media for Federal agencies. Most JPRS publications are concerned with communist countries, although there are a number of

Asian, Latin American, and African titles produced. About one half of the materials abstracted are in the scientific and technical fields.

JPRS reports are available by subscription from NTIS. These reports are basically abstracting journals, and hence are very "digestible" to English-speaking technical personal. Sample technical titles in this series are U.S.S.R./Chemistry, U.S.S.R./Engineering and Equipment, etc. The JPRS reports themselves are indexed in the TRANSDEX, a microfiche index produced by Bell & Howell.

If members of your technical user community have the need to query foreign technology, they should be made aware of JPRS's services and products.

11.4.3. Foreign Technology Acquisition at NTIS

Located within the National Technical Information Service is the Office of International Affairs. This office is heavily involved in a number of programs that are concerned with foreign technology acquisition. One aspect of this program are agreements with foreign countries that lead to the exchange of access to U.S. information for access to that country's technical information. This has lead to there being a significant portion (over 20%) of foreign S&T reports in the NTIS collection. Thus, whenever any search is made of the NTIS database, the searcher is automatically also searching a part of the world's store of technology.

Should you want further information about this program, the NTIS pamphlet PR-287, *NTIS International Technology Acquisition Program*, describes it in full.

11.4.4. Foreign Technology Databases

The online commercial database phenomenon is world-wide in scope. A indication of just how world-wide can be seen by a quick glance through the address list in any database directory. Examples of the foreign databases that are available to anyone with the language skills needed to deal with them are the databases available from the Japan Information Center of Science and Technology (JICST). These include the JICST File on Current Science and Technology in Japan, JICST File on Science and Technology, JICST File on Science, Technology, and Medicine in Japan (in English), and many others. Another example is the set of French databases available from the Centre National de la Recherche Scientifique, Centre de Documentation Scientifique et Technique.

Access to these, and many other commercial foreign technical databases, is available to any researcher willing to pay for the service. (This topic will be discussed further in the next section.)

11.5. Commercial Databases

One of the most important information resources available to Air Force scientific and technical personnel is access to the thousands of online commercial databases. These databases, which are available to anyone with a modem and the ability to pay for the service, cover the S&T literature from Vapor Pressure Datafiles to Soviet Science and Technology. While the bulk of these databases are referral in nature (meaning they serve as an index into some class of literature), many others are source databases and contain the numbers or full-text of the covered articles.

The database phenomenon has had a growth curve that almost rivals the ubiquitous personal computer. In 1980, the ***Directory of Online Databases*** (worldwide listings) listed 400 databases, 221 different database producers, and 59 different online services. The 1987 edition listed 3487 databases, 1604 database producers, and 547 online services. Also, these databases are all online at some central computer. The introduction of the compact laser disk as a dense, cheap storage media will, in the near future, lead to many thousands of locally-produced databases.

11.5.1. STINFO Responsibilities Concerning Commercial Databases

Your responsibilities regarding commercial database access are:

1. To be aware what databases are available, especially what S&T and military databases are available that pertain to your activity's interests.

2. To know what the current database access procedures are at your activity.

3. To know how information about commercial database access is currently being promoted within the organization.

4. To set up procedures to ensure that these services are being promoted and used to the full extent possible.

You should keep in mind that there are a number of alternatives to the common practice of having a person in the library be the "designated searcher" and direct end-user access discouraged or against local policies. For example, two such alternatives are (1) to set up a user search room with all the equipment , literature, and a resource person to help search if needed, and (2) encourage information-conscious end-users to get their own passwords and serve the people around them.

11.5.2. Database Availability

There are a large number of databases and the number is growing at a rapid rate. In order to determine what databases are currently available, your choice is either (1) a database search in a "database of databases", or (2) a search of an appropriate directory.

The two best "database of databases" are the Database of Databases published by the University of Illinois, which is available on the DIALOG Information System, and the Cuadra Directory of Databases which is available on the Pergammon Orbit Search Service. Either of these can be subject searched with a good deal of confidence that the important commercial databases will be found.

The best directory (out of the 10 or so that exist) is the ***Directory of Online Databases*** published by Cuadra/Elsevier, 52 Vanderbilt Avenue, New York, NY 10017. It is a quarterly, and subscriptions are currently $110 per year. (Most libraries that I have been in subscribe to this directory.)

11.5.3. Database Access

There is a political issue to be aware of concerning database usage. It is called end-user access. Because many of the original databases were extensions of a library's reference collection, it was natural that database access start out as a library service. However, the true utility of database access is as a "desktop library" and many end-users want (and should have) access to these services.

11.6. IR&D Responsibilities

11.6.1. What IR&D Is

Independent Research and Development (IR&D) is a DoD contractor's technical effort which is not sponsored or required in the performance of a contract and which consists of projects falling within basic or applied research, development, systems and other concept formulation studies. IR&D is directed toward continually improving the contractor's technological competence in order to meet DoD's future requirements for advanced technology, systems, or hardware in a timely and technically competitive manner.

Participation in the IR&D program is not mandatory, but because it brings in additional research funds, it is participated in by all contractors who qualify for the program. Originally, the criteria for participation was to be one of the top one-hundred contractors in terms of prime contract awards. This changed at some time, and now participation is open to contractors with more than a certain dollar amount in DoD contracts.

Basically, the contractors prepare an annual IR&D plan (called a "brochure") describing all the work planned or ongoing under this program. These plans are disclosed to the Government, evaluated, and are given scores. The composite score a company receives plays a part in determining the dollar value of the IR&D monies given to the contractor.

11.6.2. IR&D Information

One of the basic things to be aware of concerning IR&D data is that it is company proprietary and is exempt from disclosure under the FOIA. Also, IR&D information is limited to U.S. Government access only. (Contractors are vigorously excluded from seeing other contractor's information in any form.)

IR&D information takes two forms. First the physical brochures that are submitted by the companies contain the project descriptions that are actually scored. These tend to be bulky and contain a great deal of supporting information about each project. The binders that contain projects scored by that activity are usually kept in a secure area by the IR&D focal point, but are accessible by any Government engineer wanting to review or access the data.

The second form the IR&D information takes is as a short indexed summary submitted to DTIC on DTIC Form 271. This information is gathered and compiled into the IR&D database where it can be searched by

DTIC users. The information in this database is a one-page summary of the larger multi-page description found in the brochure.

The IR&D information has important uses beyond its direct use for scoring. First, whenever a new DoD project is proposed, the IR&D database should be searched to determine is there is any duplication of effort or similar projects that the proposed project should be coordinated with. Second, when seeking contractors or evaluating proposals, the IR&D database can be valuable in establishing a track record, accomplishments, and ongoing work in a particular field.

11.6.3. STINFO Responsibilities Regarding IR&D

The company brochures and scoring is handled by an IR&D focal point at each activity performing IR&D evaluations. This aspect of IR&D is not of direct interest to STINFO. The aspect that is of direct interest is the subsequent use of the IR&D information.

A procedure should be set up so that the IR&D database is searched (along with the WUIS and TR databases) whenever a new R&D work unit is initiated at that activity. Also, the STINFO Program Manager should be knowledgeable as to the location and status of the physical brochures (they are usually kept only for the current year and then destroyed) so as to be able to (1) refer the user to this collection, and (2) include access procedures in any user training that you set up.

11.7. Technical Meetings

The STINFO Program Manager duties regarding technical meetings are to:

1. Help plan technical meetings.
2. Become familiar with foreign disclosure procedures when foreign nationals are invited to take part in meetings.
3. Report on planned meetings and ensure that interested personnel are informed of such meetings.

The Air Force policies and guidance on this function are set out in AFR 80-43, "***Sponsoring or Cosponsoring and Conducting Scientific and Technical Meetings***." (One of the four "governing" regulations for the STINFO program.)

11.7.1. What is and is not Considered a Technical Meeting

The definition of a technical meeting seems both intuitive and general. A technical meeting is defined as a formally scheduled session conducted by DoD components, DoD contractors, or by an association, institute, or society whose membership consists of DoD contractors or DoD personnel. However, there are also audience and size considerations that can impact this definition. A meeting of just DoD personnel or a meeting of contractor and DoD personnel involved in a specific project is not usually considered a "technical meeting" even if it is formally scheduled. However, if the audience is at all open (in the sense of discretionary attendance), or if the meeting involves technical papers being prepared and presented, it is almost certainly a "technical meeting."

11.7.2. Sponsoring/Cosponsoring Technical Meetings

Air Force organizations are encouraged to sponsor or cosponsor technical meetings when it is in the interest of the Air Force to have the information issued promptly and widely, and to exploit discoveries and share information, innovations, and inventions. Holding such meetings is usually an infrequent and irregular activity of those involved. Because STINFO is involved, and because you are familiar with the regulations and procedures involved, it is your responsibility to help these organizations comply with the regulations and get their meeting held.

The fundamental meeting sponsorship points to be aware of are:

1. A technical meeting where classified military scientific and technical information is disclosed is subject to a number of controls. Among the more important of these controls are (1) the meeting may only be sponsored by a DoD activity, (2) the sponsoring activity takes on the burden of security and must appoint a security sponsor to ensure that the provisions of the Security regulations are met, and (3) the meeting may only be held at either a DoD site or a cleared contractor site.

2. A technical meeting where unclassified export-controlled technical information is disclosed is also subject to controls. The most important control is that such data must be presented only in sessions where the recipients are eligible to receive such data, unless specific release authority has been received.

3. A technical meeting involving foreign nationals in the audience is subject to the rules of Foreign Disclosure and all presentations must be cleared by the Foreign Disclosure Office.

4. A technical meeting involving the public (as opposed to just Government employees and DoD contractors) is subject to the security review process performed by the Public Affairs Office. This is true for all DoD employee unclassified presentations and all DoD contractor presentations if stipulated in the contract.

11.7.3. Foreign Participation at Technical Meetings

The rules concerning foreign participation at technical meetings are different for classified and unclassified meetings.

If the meeting is classified, guidelines for foreign participation are established in DoD Directive 5230.11, "*Disclosure of Classified Military Information to Foreign Governments and International Organizations*," and DoD Instruction 5230.20, "*Control of Foreign Representatives*." In addition, all foreign participation in classified meetings must be reported as per DoD Directive 5200.12, "*Policy on the Conduct of Meetings Involving Access to Classified Information*."

If the meeting is unclassified, foreign participation is under the control of the meeting sponsor. If there is foreign participation, then the level of DoD participation must take this into account, especially in the matter of export-controlled unclassified information.

11.7.4. Proceedings of Technical Meetings

The papers presented at technical meetings are considered a STINFO product and should be given a report documentation page and forwarded to DTIC for announcement and secondary distribution. It is the STINFO Program Manager's responsibility to see that the presenters are aware of this requirement and execute it. It is a local decision (that you should participate in) as to whether the set of papers should be submitted as a single document, or the individual papers be submitted as separate documents. In any case, where both classified and unclassified papers are given, they should be separated (whenever possible) into separate unclassified and classified documents.

11.7.5. STINFO Involvement in Technical Meetings

The specific STINFO involvement in the technical meeting process is to:

1. Review all requests for sponsoring meetings.
2. Establish a request procedure and guidance so that individuals will know the steps to follow, policies, required endorsements, forms and letters to submit, and expected lead times.
3. Assist the requestor in following this procedure.
4. Track all papers presented and proceedings to ensure that the author/contracting office prepares a report documentation

page and submits the paper through the STINFO office to DTIC.

11.7.6. Regulations Relating to Sponsoring, Cosponsoring, and Conducting Technical Meetings

There are a number of Air Force regulations and DoD directives that relate to sponsoring meetings and presenting papers at these meetings. These are:

1.	AFR 80-43	Sponsoring or Cosponsoring and Conducting Scientific and Technical Meetings.
2.	AFR 30-9	Meetings of Technical, Scientific, Professional, or Similar Organizations.
3.	AFR 80-34	Withholding Unclassified Technical Data From Public Disclosure.
4.	AFR 30-30	Standards of Conduct.
5.	DoD 5220.22-M	Industrial Security Manual for Safeguarding Classified Information.
6.	DoD 5200.12	Policy on the Conduct of Meetings Involving Access to Classified Information.
7.	DoD 5230.11	Disclosure of Classified Military Information to Foreign Governments and International Organizations

11.8. Government-Industry Data Exchange Program (GIDEP)

GIDEP Operations Center
Department of the Navy
Naval Fleet Analysis Center
Corona, CA 91720
(714) 736-4677

Air Force participation in GIDEP is governed by AFR 80-10, "***Government-Industry Data Exchange Program***". This regulation states that GIDEP participation is mandatory for Air Force Systems Command and Air Force Logistics Command activities involved in "acquisition, contracting, manufacturing, research and development, modification, reliability, quality assurance, and logistics," and authorizes the use of a number of reporting forms.

11.8.1. What GIDEP Is

GIDEP is a cooperative activity between a large number of Government and Industry participants seeking to reduce or eliminate expenditures of time and money by making maximum use of existing technical data. The program provides a means to exchange certain types of unclassified technical data essential in the research, design, development, production, and operational phases of the life cycle of systems and equipment.

The five data interchanges (databases) that GIDEP supports are:

1. **Engineering Data Interchange** - Contains engineering evaluation and qualification test reports, nonstandard parts justification data, parts/materials specifications, manufacturing processes, failure analysis data, and other related engineering data on parts, components, materials, and processes. Also included are reports on specific engineering methodology and techniques.

2. **Metrology Data Interchange** - Contains test equipment calibration procedures and related metrology engineering data on test systems, calibration systems, and measurement technology.

3. **Reliability-Maintainability Data Interchange** - Contains failure rate/mode and replacement rate data on parts and components based on field performance information or based on reliability demonstration tests of equipment, subsystems, and systems.

4. **Failure Experience Data Interchange** - Contains objective failure information generated when significant problems are identified on parts, components, processes, fluids, materials, or safety information.

5. **Value Engineering Data Interchange** - This is a new item which has been added recently. It contains summaries of DoD-approved value engineering projects.

11.8.2. GIDEP Participation

GIDEP participation is not mandatory, nor is it even desirable for every defense activity. However, GIDEP participation should be considered for any activity that uses the types of information contained in the five data interchanges.

11.8.3. GIDEP Services

GIDEP provides a number of services to its user community. These services are:

1. **Access to the five data interchanges**. Access is in the form of microfilm sets of source documents, hard copy indexes, and online access to the database.through

2. **Alerts** - notifications of specific parts/materials/equipment failures by members of GIDEP.

3. **Safe-Alerts** - Similar to Alerts, but pertaining to worker hazards.

4. **Urgent Data Requests** - a system by which a GIDEP participant may query all other GIDEP members on specific problems.

11.8.4. Relationship Between STINFO Program Manager and GIDEP

There is no formal relationship between the GIDEP Program and the STINFO Program. However, because of the nature of the two programs, you will (if your organization is a GIDEP participant) need to either (1) monitor the GIDEP focal point, (2) form a liaison relationship with this person, or (3) find that the GIDEP duties have been assigned to the STINFO Office. GIDEP participation represents both an information flow both into and out from an organization. The only allowable information flow out of your organization and into GIDEP is unclassified/unlimited data, and this data must be cleared through the Public Affairs Office

11.9. Information Support Training

The best, most complete information support program isn't worth anything if it is ineffectively promoted and the user community is in ignorance about its availability and the support it provides. Your responsibility in the area of user support goes beyond just setting procedures in motion to ensure that the appropriate services are available. You must promote these services and ensure that knowledge of their availability is the rule, not the exception.

The two most basic aspects of training are (1) to have prepared a STINFO user's guide, and (2) to have designed a short presentation/course that can be given to STINFO producers. Both of these topics will be discussed later in these notes in the Section on "Promoting the STINFO Function."

12. STINFO Duties - Internal

12.1. Key Points

The STINFO Program Manager is responsible for running both a program and the STINFO office. A reasonable expectation that the Air Force has of you is that your program and office be run in a professional manner and in accordance with the Air Force regulations. A second expectation is that the STINFO Program Manager become the "single point of contact" for all STINFO activity at that organization.

Four specific internal duties that you are required to perform are:

- To maintain an inventory of your organization's STINFO activities and resources.
- To explore methods for improving STINFO systems and procedures on an ongoing basis.
- To identify STINFO information available outside your organization that should be flowing into the organization.
- To self-inspect the STINFO program at regular intervals to determine if the regulations are being followed and the program goals are being achieved.

12.1.1. Maintain an Inventory of Organization's STINFO Activities and Resources

You should prepare and maintain an internal document describing all the STINFO activities and resources at your organization that you are aware of. You should include descriptions of all information centers, all information services your organization subscribes to, all STINFO procedures that have been set up, etc. In addition, you should keep this document up-to-date as new procedures are developed, new STINFO-related activities are added, and unused STINFO services are dropped.

This document will have a number of obvious uses and will help you carry out the STINFO function. In addition, (1) it will serve as the basis for the local STINFO User's Guide (guess who is responsible for preparing that), and (2) it will serve as core of the training given to STINFO users.

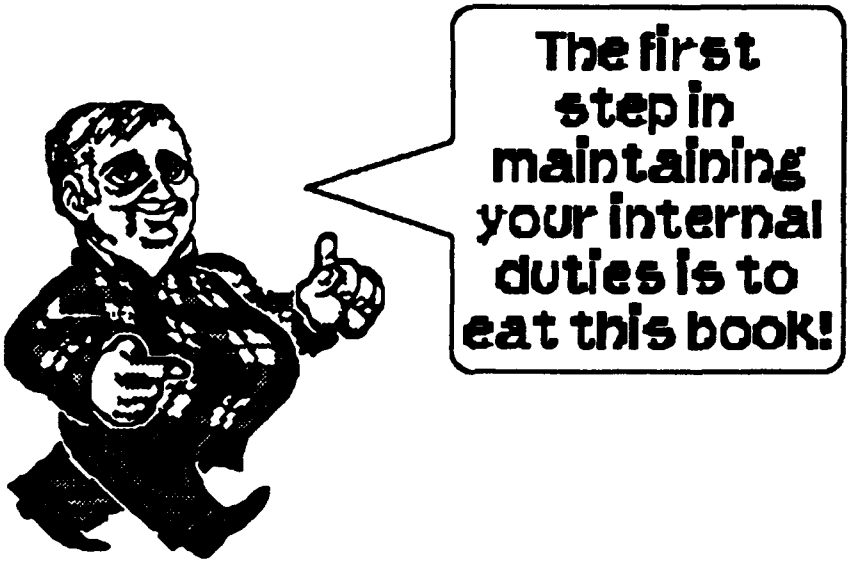
[Author's note: In a recent course I was involved in at a Navy T&E center the topic of the Information Handling Service's (IHS) Visual Search Microfilm Files (VSMF) came up. This is a valuable (and expensive) information service containing both indexes and full-text vendor catalogs,

standards, etc. Because of the nature of the work being done at that activity, this service was of high interest to the engineers in the course. After pointing out that the local technical library did not subscribe to the VSMF, two students mentioned that their separate groups did subscribe. Two things were immediately apparent to everyone. First, the two students who were in groups subscribing to this service were unaware of the other's subscription, and second, not one of the other twenty engineers in the course were aware of either subscription!]

12.1.2. Explore Methods for Improving STINFO Systems and Procedures

You will be setting up (and be involved with) a number of STINFO-related procedures. Each one of these procedures should be examined on an ongoing basis to seek ways to make them more efficient and more responsive to your technical user community.

Two procedures that should be examined closely and regularly are (1) the processing procedure associated with the technical publication program, and (2) the information services access procedures. In the first case, you should be reexamining this procedure to see what can be done to speed up whatever delays exist between the receipt of a draft in STINFO and the primary distribution of the document. Also, since most technical reports are prepared on word processors and available on diskettes, should paper drafts be circulated through the review cycles? And, would electronic versions of the Report Documentation Page enable much quicker review of this information?



In the second case, you should examine your user information access procedures to see what steps can be taken to make these services more readily available and accessible without bureaucratic hurdles. For example, can your users get an immediate DTIC search made, or are they required to make appointments?

12.1.3. Identify STINFO Information Available Outside the Organization

In order to support your user community, you should (1) identify all STINFO sources outside of your organization that might be useful to your technical user community, (2) make the appropriate people aware of them, and (3), if access is desired, assist the engineers and scientists in obtaining the service.

You should not just concentrate on "what's new." If you are in touch with your users, you will be aware of the almost universal gulf that exists between the currently available information services and the general knowledge of these services.

The key to carrying out this task is to educate yourself as to what is available now, know your activity's technical program well enough to recognize the kinds of services that would be of interest to the users, and then keep informed as to any new information products, databases, and services. Two items that you should be especially aware of are:

1. Any new or emerging Information Analysis Centers whose technical speciality might be relevant to the organization.

2. Any new databases that are coming on line.

12.1.4. Self-inspection of STINFO Activities

You should, on at least an annual basis, perform a self-inspection of your program. One of the most efficient ways to do this is to use "self-inspection checklists" that either you prepare or have already been prepared.

You can easily prepare your own Self-Inspection Checklist. Simply take each regulation which governs or impacts your position and extract the list of responsibilities in them. Then, put the words "Do you.." in front of each of these responsibilities and replace the period with a question mark, and you've generated your Self-Inspection Checklist

Probably of greater interest are the series of three inspection checklists which currently exist and are available from the STINFO Program Management Office. Self-Inspection Checklists exist for the

STINFO Program itself, the Technical Publication Program, and the Work Unit Information System.

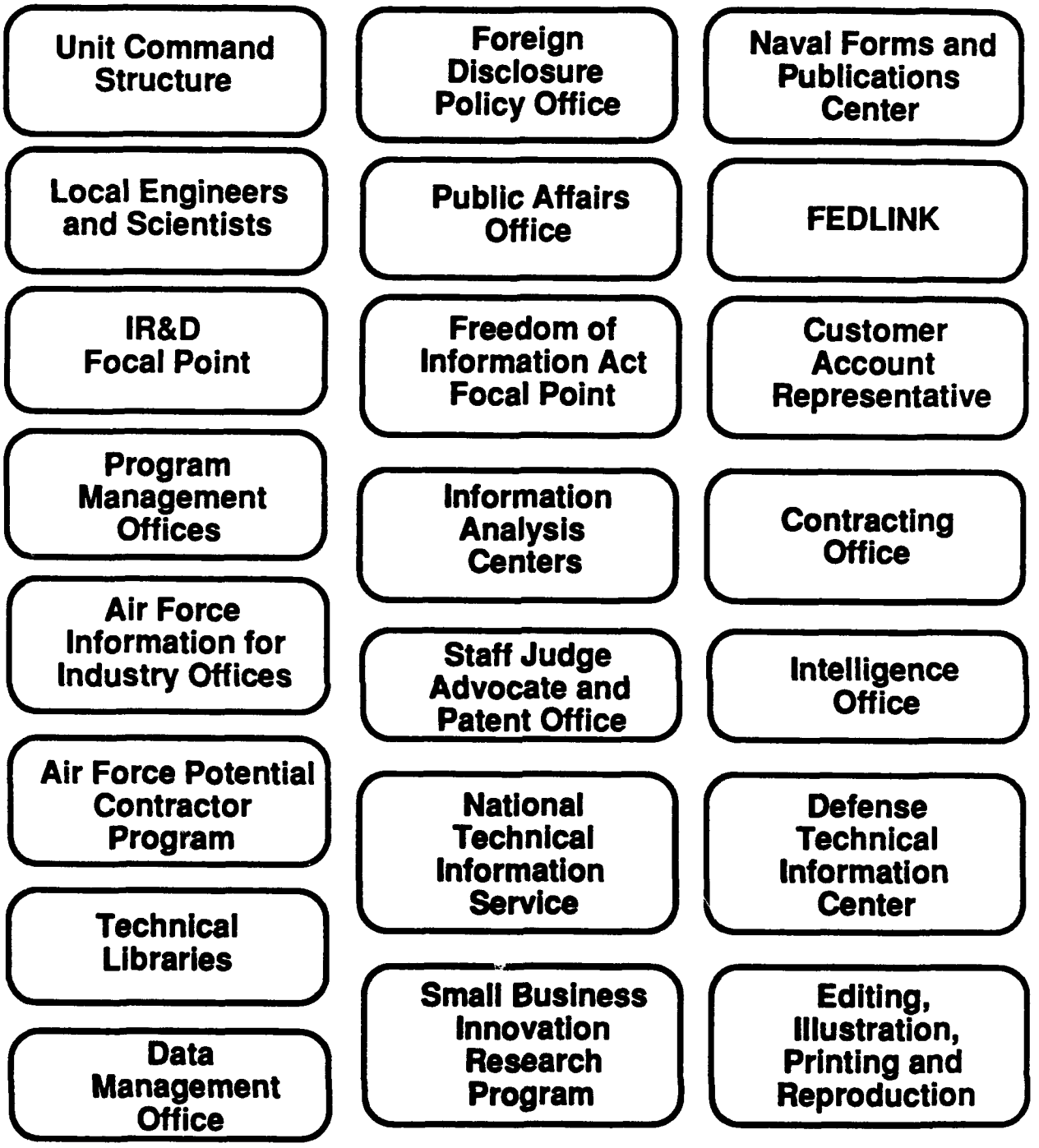
It would be very easy to take this duty lightly and in ten minutes answer yes or no to the 80 or so questions contained in these lists. A more meaningful and effective technique to make these lists work for you would be to make a copy of the lists, cut and tape each question to the top of a blank sheet of paper, and then answer the question truthfully and elaborate on your answer.

Aside from just the introspection that this provides, you can use your answers as the impetus for change. First, take the sheets with solid, supported "Yes" answers and put them away. Then, take the remaining sheets and divide them into those that you waffled on and those with a solid "No" answer. You probably need help on the solid "No" questions. On the others, you need to prioritize them, and set a new commitment to bring the program up to the expected standard.

13. STINFO Duties - Liaison and Coordination

13.1. Key Points

- The STINFO Program Manager interfaces with many other individuals and programs. This contact varies from just having an awareness of that program or maintaining a liaison relationship, through active support or coordination relationships. Some of the groups, individuals, and programs are:
  - Unit Command Structure
  - Local Engineers, Scientists, and Program Management Offices
  - Independent Research & Development Focal Point
  - Air Force Information for Industry Office
  - Air Force Potential Contractor Program
  - Technical Libraries
  - Data Management Office
  - Foreign Disclosure Policy Office
  - Public Affairs Office
  - Freedom of Information Act Focal Point
  - Information Analysis Centers
  - Staff Judge Advocate
  - National Technical Information Service
  - Small Business Innovation Research Program
  - Naval Forms and Publications Center
  - FEDLINK
  - Customer Account Representative
  - Contracting Office
  - Defense Technical Information Center
  - Editing and Illustration Group
  - Printing and Reproduction
  - Intelligence Office
  - Patent Office



SOME OF THE OFFICES AND PROGRAMS THE STINFO OFFICE WORKS WITH

13.2. Unit Command Structure

It is important to a successful local STINFO program that the STINFO Program Manager coordinate the program with the needs of the activity administration. Local administration must be made aware that STINFO is one of their most important products, and in some situations, the only product resulting from a work unit.

To support the needs of the local administration, the STINFO Program Manager should become a contributing member of any regular staff meetings involving the technical activities of the organization. The STINFO Program Manager should prepare regular status summaries of all STINFO being processed, as well as identifying specific problems and recommending actions on these problems.

13.3. Local Engineers, Scientists, and Program Management Offices

The STINFO office has a responsibility to the local engineers, scientists and program management offices in a number of areas. (Most of these were discussed earlier under the heading "User Support.") Some of the areas are:

1. Training as to STINFO responsibilities, services, and procedures.
2. Information support including access to DTIC databases and related services.
3. Technical meeting sponsorship guidance.
4. Expeditious processing of all generated STINFO materials.

13.4. Air Force Information for Industry Offices (AFIFO)

13.4.1. What is an AFIFIO

AFIFIOs provide the industrial, scientific, and academic community with information on DoD and USAF acquisitions, R&D requirements, plans, and future needs. To do this, they maintain a current collection of planning and technical requirement documents, and also administer the Air Force Potential Contractor Program (AFPCP). One of the best guides to this program is the *AFIFIO Brochure*, a copy of which has been included in the Appendix to these notes.

THINK OF AN AFIFIO AS A READING ROOM FOR AIR FORCE PLANNING AND REQUIREMENTS INFORMATION, USED BY CONTRACTORS, AND MANNED BY A HELPFUL, KNOWLEDGEABLE STAFF

13.4.2. AFIFIO Locations

Air Force Information for Industry Office
5001 Eisenhower Avenue
Alexandria, VA 22333-5000
(703) 274-9305
(This office is colocated with the Navy's NARDIC and Army's TILO offices. These offices parallel the AFIFIO function for the other services.)

Air Force Information for Industry Office
Attn: TSGT Irma Moody-Ramero, USAF
527 South Lake Avenue, Suite 101

Pasadena CA 91106
(818) 792-3192
(Also colocated with the NARDIC office.)

Air Force Information for Industry Office
AFWAL/GLIST (AFIFIO)
Wright-Patterson AFB OH 45433
(513) 255-5766
(Also colocated with the NARDIC office.)

13.4.3. How an AFIFIO Operates

In order to use an AFIFIOs services, the organization must register first, thereby establishing a need to know. This need to know is based on DD Form 1540 information. If the organization does not have a current defense contract and meets the requirements of the AFPCP program, access may granted through this channel.

Visits to an AFIFIO are by appointment only. Visitors to the AFIFIO must have a clearance on file at the AFIFIO prior to the visit in order to access any classified materials.

13.4.4. Information Maintained by an AFIFIO

AFIFIOs have available for review a large collection of Air Force planning information and materials, both unclassified and classified. There is a list of the types of documents available for on-site review on page 6 of the AFIFIO brochure. These materials range from the annual Technical Objective Documents and Program Element Descriptive Summaries, to brochures, pamphlets, and organizational charts.

You should be aware that planning materials have a history of changing fairly rapidly year to year, and once written, not being maintained by the generating office. It is one of the AFIFIO manager's duties to ensure that the document collection is as current as possible through either automatic distribution or through direct contact with the offices generating these materials.

13.4.5. Relationship with STINFO

There are four situations in which a STINFO Program Manager will have a relationship with the AFIFIO office:

a. As the occasions arise, making contractors aware of the AFIFIO offices and services, and referring them to the nearest office. You should also make your local S&T community aware of this program (because of the potential need to direct

their contractors to these offices) by including this program in presentations and in any STINFO guides you might publish.

b. Keeping the AFIFIOs aware of any technical meetings being conducted by your activity. This function should be built into your procedures for processing meeting sponsorship requests.

c. Assisting in the evaluation of AFPCP requests. In the event that the AFIFIO manager needs input from your organization concerning the validity of a AFPCP request, you will be expected to respond to this need.

d. Sending to the AFIFIO any literature published by your activity that would be of interest to the AFIFIO and its clientele. You, as part of your ongoing duties, you should be aware of all Annual Reports, R&D planning documents, brochures, and other items of potential interest to Air Force contractors generated by your activity. Since the AFIFIOs are the ideal conduit from the originator to the contracting community, it is part of your duty to see that these materials are sent to the three AFIFIOs

13.4.6. Regulations Governing the AFIFIO

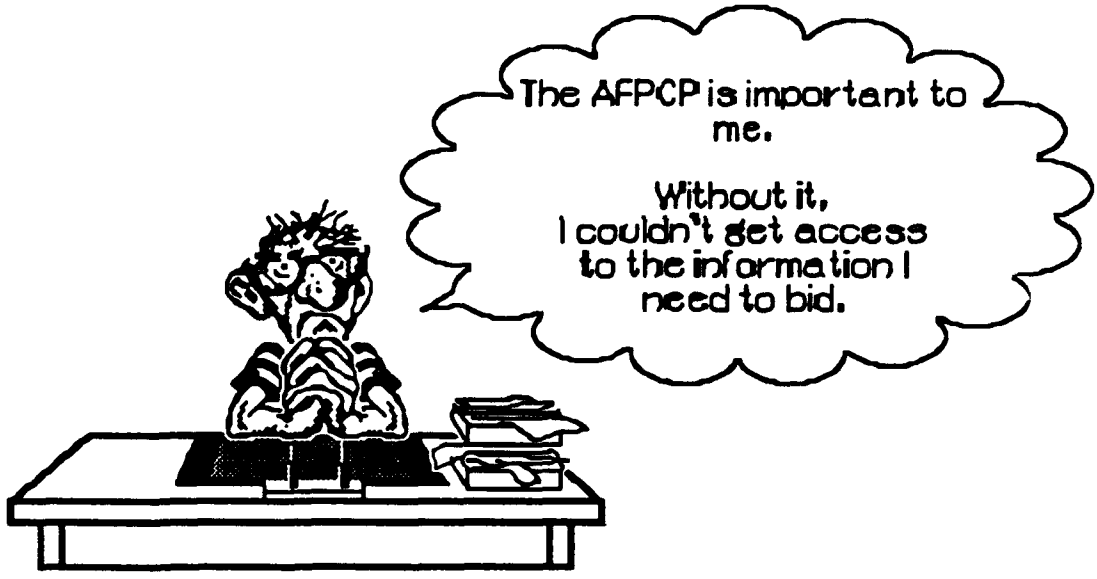
The single government regulation for AFIFIOs is:

AFR 80-11, Air Force for Industry Offices

13.5. Air Force Potential Contractor Program (AFPCP)

13.5.1. What the AFPCP Is

The AFPCP (also known as the PCP) was established to certify and register private companies not having a current defense contract for access to scientific and technical information on Air Force needs, requirements, work, and accomplishments associated with research, development, test, and evaluation. The AFPCP provides these potential contractors with the opportunity and means to obtain current scientific and technical information from either DTIC or the AFIFIO.



13.5.2. Registration for the AFPCP

Qualified individuals and companies who have the potential for eventually receiving a contract with the USAF and who wish to register for this program enter into a policy agreement with the AFPCP Manager resident in the AFIFIO. These policy agreements are in effect for periods of three years, at which time they are reviewed and my be renewed.

The general procedure that a company goes through in order to qualify for the AFPCP is to submit a package containing:

a. DD Form 1540, Registration for Scientific and Technical Information Services

b. DD Form 1541, Certification of Facility Clearance and Storage

c. Supplemental Information (to support the request for access to specific fields on the DD Form 1540

d. Policy Agreement (a standard form)

13.5.3. Relationship of the STINFO Program Manager to the AFPCP

There is no direct connection between the STINFO Program Manager and the AFPCP. The STINFO Program Manager should be aware of this important program, but should not take on the processing any policy agreements: this is the responsibility of the designated AFPCP Manager at the nearest AFIFIO. Any requests for information about this program should be directed to the nearest AFIFIO.

13.5.4. Information About the AFPCP

There is an AFSC pamphlet entitled *Air Force Potential Contractor Program* dated October 1986, describing all the features, registration procedures, etc. for this program. Copies of this pamphlet are available from the AFIFIO offices.

13.6. Technical Libraries

13.6.1. What Technical Libraries Are

Traditionally, the center for all information has been the library. However, with the advance of the information age and online services, this traditional role is being challenged.

Libraries are basically "information stores." Sitting in a centralized location and having a large collection of materials that can be shared among the user community, libraries perform an important, but usually passive role in the information flow of an organization.

The major things that most libraries provide are:

1. **Reference Services**

   Reference Librarians
   Reference Collection
   Database Access

2. **Interlibrary Loan and Access to OCLC**

3. **SDI and Current Awareness Services**

4. **Collections of Materials**

   Basic Collection (Books)
   Periodical Collection
   Reports Collection (Documents Collection)
   Microform Collection (Microfiche/Microfilm)
   Depository Collection (Government Documents)
   Map Collection
   Special Collections

5. **Publications**

   Guides
   Journal Holdings Lists
   Recent Acquisitions Bulletins

Reference Services

The major reference services that a library offers are (1) the reference staff, (2) the reference collection, and (3) access to online services. The purpose of these reference services is to provide an initial place for you to get information and guidance.

The basic thing that reference librarians do is point you in the right direction to find a particular piece of information. The reference collection is the set of materials and books that have been separated from the general collection because of their utility or because they are guides to information in the collection of books and periodicals. The reference collection is usually broken into two parts. The ready reference part is usually behind the reference librarian's desk and contains the books which are referred to most frequently.

The online service access that libraries provide varies from library to library. Because many of the commercial databases are really just an extension of the reference collection, this was a natural evolution. All modern technical libraries have access to some online services.

One of the fundamental uses of databases is to generate a custom bibliography for a topic. This use has become so prevalent, that the manual production of a bibliography (involving searching the library's holdings, abstracts and indexes, previous bibliographies, etc.) is now the exception instead of the rule. In addition, many libraries anticipate extensive interest in a particular topic and prepare bibliographies for multiple distribution.

How the end-user access to these services is handled is a sore point to many engineers. Some libraries allow their user community to directly access these services from terminals within the library. Many other libraries treat access as an internal resource, do not advertise their existence, and hence discourage engineers from having any knowledge of these resources.

Interlibrary Loan and Access to OCLC

Not every library has every book and periodical that has ever been published. (In fact, none do.) However, libraries are well-known for their cooperation with one another. If the library does not have a copy of a particular publication, a system called "interlibrary loan" exists so that materials can be shuttled from one library to another. Therefore, if there are a small number of items that a user wants access to, it is easier for your local library to get these materials via interlibrary loan than for to user to go to another library to access them. In most modern libraries, interlibrary loan is accomplished by using an online service called OCLC (Online Computer Library Center).

OCLC is a very large information system used by librarians for a number of library-related functions and is almost never searched by end-users. The initial idea behind OCLC was to eliminate the costly duplicate cataloging of materials by having a centralized database of cataloging information. The major by-product of this service was printed cards.

At the heart of the OCLC system is a huge database, the Online Union Catalog, which contains about 12 million records. Each record is a

description of a book, serial, map, or other library holding, and symbols that identify which libraries have copies of that item. If a user needs access to an item that the library doesn't have, the reference librarian can identify nearby libraries that do have the item by searching this database.

Once the other library has been identified, the user can choose to either physically go to that site or, by using the OCLC Interlibrary Loan Subsystem, determine the interlibrary loan policies of the holding library and submit the loan request online. By using this system interlibrary loan is cut to an average of six days.

SDI and Current Awareness Services

Selective Dissemination of Information (SDI) and Current Awareness programs are two ways for engineers to keep up-to-date with the latest publications in their fields of interest. To use these services, the engineer first must register an interest profile with the library. An interest profile is just a list of the topics and keywords that the person is interested in.

If this service is automated (the majority of cases), the profile is entered into a "system" and associated with specific databases. Then, each time those databases are updated, a report is automatically generated and sent to the user. In the report are listings of all new records contained in the update that matched the interest profile. When implemented in this fashion, Current Awareness programs are fairly easy to handle and require a minimum amount of work by the librarian. The hardest part of this procedure is maintaining up-to-date profiles of the user community.

Collections of Materials

Libraries contain many different types of collections of materials, and to obtain access to these collections is the major reason most people use libraries. The types of collections that you find in libraries are usually grouped into:

Basic Collection (Books)

Periodical Collection

Reports Collection (Documents Collection)

Microform Collection (Microfiche and Microfilm)

Depository Collection (Government Documents)

Map Collection

Special Collections

The basic holdings of a library are its main collection of books. These holdings can be very general, as in the case of a university library, or very specific, as in the case of an association library. It's not the size of the holdings that matter: it's the size and currency of the holdings that relate specifically to the activity's current RDT&E problems.

Another major asset that a library has is its periodical collection. Whether you call them magazines, periodicals, journals, or serials, they all mean the same collection. You are probably aware that most libraries separate the current periodicals from those that have been bound together. "Current" can be anything from the latest issue to the last calendar year's worth of titles. Most libraries keep the current periodicals by title and the bound periodicals by classification (but all together and separated from the main collection).

The term "depository collection" is foreign to most people. This is unfortunate, since a depository collection can be a valuable information resource. You are aware that all libraries have some government publications in their collections. What you might not be aware of is that certain libraries, called depository libraries, have extensive government document holdings. The depositories are subsidized in order to make the government documents more widely available. Unfortunately, by taking the government documents collection and setting it outside the main collection, it gets doomed to gather a lot of dust.

Most major technical libraries have separated their microform holdings from their general collection. ("Microform" is a general term meaning either microfilm or microfiche.) Many users tend to shy away from the microform collection because they have a strong preference for paper copy. Because of the economics involved, microforms are the media of the near future (they'll be overtaken by optical laser disks at some point), so we all have to learn to overcome this prejudice.

Publications

Most libraries publish three general purpose publications. These are (1) a Guide to the library and its services, (2) a Periodical Holdings List containing an list of all the journals the library currently receives and has received in the past and cataloged into its periodical collection, and (3) usually a Library Bulletin listing all recent acquisitions to the library. The quality and usefulness of these publications vary greatly from library to library.

13.6.2. Relationship of the STINFO Program Manager to the Technical Library

The fundamental relationship of the STINFO Program Manager to the local technical library is to help the technical librarian identify the STINFO needs of the organization.

Technical libraries act as a service function that the end user voluntarily chooses to either use or not. On the other hand, the STINFO-producing engineer must interact with the STINFO office when new work units are begun, to get their publications out the door, and in order to sponsor conferences. Also, most engineers will not be aware that the STINFO office is working behind the scene to track documents, keep up with the technical activities of an organization, obtain new information services, and in general be on the active look out for STINFO services that would help the engineer do their job.

Since the STINFO Program Manager's main function is not to create or maintain collections of technical materials, there is little or no overlap in this area. However, because STINFO is the primary interface to DTIC's online services, there is a great deal of common interest in providing online services to the user community. (The only collection of materials that the STINFO Program Manager might be responsible for are those few items held back from DTIC submission.)

13.7. Data Management Office (DMO)

The duties of the Data Management Office (DMO) and the STINFO office are very complementary. The DMO (which is a part of the contracting chain) duty of highest interest to the STINFO function is that the DMO advises and assists project officers on the completion of the Contract Data Requirements List (CDRL), and then monitors the technical data deliverables.

13.7.1. The Contract Data Requirements List (CDRL)

The CDRL (DD Form 1423) is the part of a contract that specifies all technical data deliverables required by that contract. Each deliverable is identified by number, title, and contract reference. Also, the distribution, frequencies, and due dates for each item are also specified.

Each item on the CDRL is referenced to a Data Item Description (DID), and usually has some specific comments that add to the information in the DID.

13.7.2. The Data Item Description (DID)

A Data Item Description (DID) is a set of rules that define for the contractor the content and substance of that data item. In essence, because the contractor is not obligated to follow the military regulations, the DID serves in their place to standardize the contract deliverables. Hopefully, this ensures that when the contract specifies a technical report, the contractor does not deliver a novel.

The DID itself is DD Form 1664, and there are a large number of DIDs (around 3000) in existence. A complete set of DIDs can be found in your local DMO. The complete listing and index for the DIDs is found in DoD 5010.12-L, "Acquisition Management Systems and Data Requirements Control List," also known as the AMSDL.

The DID which is to be used for Scientific and Technical Reports has recently been revised and has been assigned number DI-MISC-80711. A copy of this DID is included in the Appendix to these notes.

The AMSDL contains DID number, title, and keyword-in-context indexes for all DIDs cleared for use in defense contracts by the Office of Management and Budget. It also contains background information on the DIDs issuance process, the availability of DIDs, and a list of the current Data Management focal points in the DoD for DID approval, processing, and distribution.

13.7.3. STINFO/DMO Relationship

Because the CDRL specifies all contractor-generated STINFO items, it is one of the major inputs into any STINFO tracking and monitoring system you may devise.

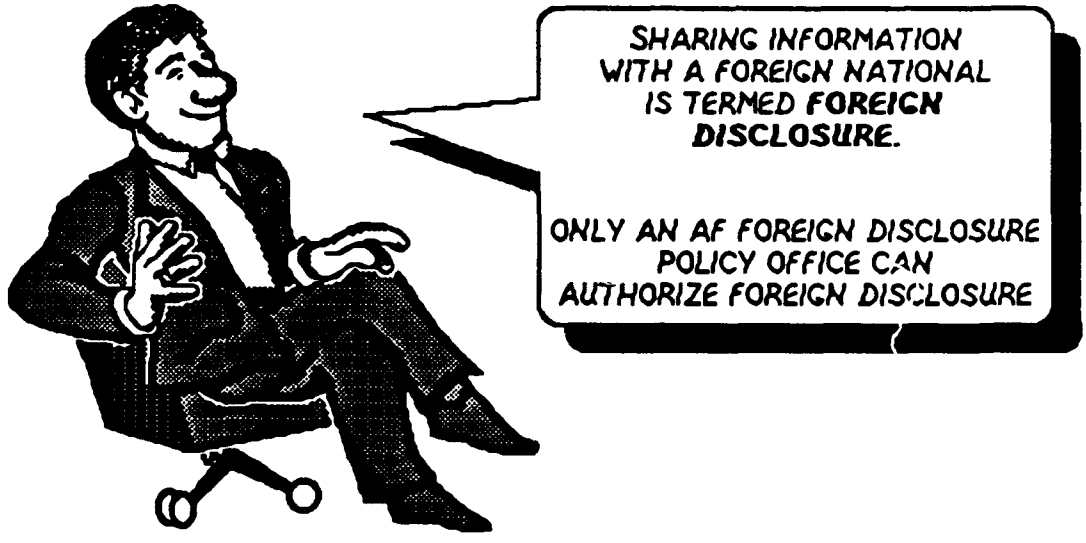
It is the technical office, not the DMO or STINFO, that actually receives the items from the contractor and signs off on the DD 250 Form. The technical office then, eventually, passes the items to STINFO for processing. It is very important that the items be reviewed for completeness, adherence to standards, and that they meet any other requirements of the DID before the technical office officially accepts and signs off on the item.

Should the technical office accept any sub-standard STINFO from a contractor, it is the technical office's responsibility to correct the problem: it is not a STINFO function to bring sub-standard items up to par as part of the processing function.

13.8. Foreign Disclosure Policy Office (FDPO)

13.8.1. What Foreign Disclosure Is

According to National Disclosure Policy, information is a national security asset which must be conserved and protected. Military information is information under the control of the DoD and its departments, and requires protection in the interest of national security.



Sharing information with foreign nationals is termed **foreign disclosure**, and refers to the authorized transfer of military information to a foreign government, foreign national, or international organization such as NATO.

13.8.2. National Foreign Disclosure Policy

Normally, U.S. classified military information is provided only to officials of the U.S. Government and to U.S. defense contractors who have (1) the proper security clearance, and (2) have a need to know the information to do their job.

This same information may be shared with a foreign government or international organization only in certain situations. There are five policy objectives, or criteria, all of which must be satisfied before foreign disclosure will be approved. These are:

1. Disclosure must be consistent with the U.S. foreign policy toward the recipient nation or organization.

2. The disclosure must not seriously jeopardize the military security of the U.S.

3. An assessment of the foreign recipient's ability to give the information substantially the same degree of security protection that we give it must be made.

4. The benefits to the U.S. must be at least equivalent to the value of the information disclosed.

5. The information to be provided must be limited only to that which is necessary to accomplish the purpose of the disclosure.

13.8.3. What the Foreign Disclosure Policy Office Is

The Secretary of the Air Force has the authority to disclose or deny access to U.S. classified military information originated within the Air Force. The Foreign Disclosure Policy Office (HQ USAF/CVAIP) is designated as the principal for disclosure matters within the Air Force, and this office has, in turn, delegated disclosure authority to Foreign Disclosure Policy offices at the major commands and at subordinate levels.

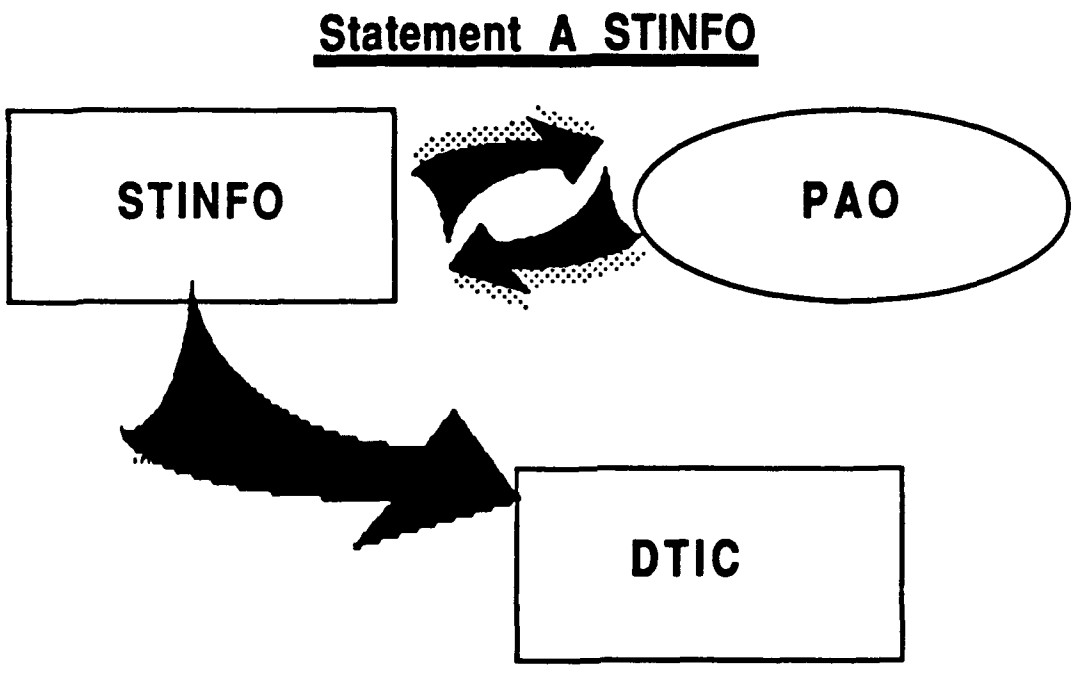
It is the Foreign Disclosure Policy Office that has overall responsibility to implement Air Force foreign disclosure policies and procedures, and arrange for the authorized release of military information to foreign governments and foreign nationals. FDPOs are guided by Delegation of Disclosure Authority Letters (DDLs), that are issued by HQ USAF/CVAIP. The DDLs establish guidelines and provide authority to release classified U.S. military information to foreign governments or international organizations on a continuing basis.

13.8.4. Relationship of STINFO and FDPO

There is no continual direct interaction between the STINFO office and the FDPO. You should, however know who and where your FDPO is, and be alert to foreign disclosure situations involving personnel from your organization. This includes participation in scientific and technical meetings which include foreign participation (including meetings held in the U.S.), visits of foreign nationals to your organization, and any work-related foreign travel. The STINFO Program Manager should be aware that the FDPO has the authority (and the practical need) to reword the distribution limitation statements in special situations.

13.9. Public Affairs Offices

The Public Affairs program is an on-going effort to inform and increase the public understanding of the missions and programs of the Air Force. **Security Review** is a service performed by Public Affairs personnel to ensure that the information is released quickly, unclassified, technically accurate, and conforms to established Air Force and DoD policies. All limitations and policies concerning technology transfer, such as the withholding of unclassified technical data from public disclosure and the International Traffic in Arms Regulations must be adhered to.



The review of information prior to public release is called Security Review, and must be applied to all technical information, no matter what size, shape, or form it takes. The major exception to this rule is information derived from 6.1 funding (basic research) whether done by a contractor or a university, and information derived from 6.2 funding (exploratory development) and performed on campus at a university.

13.9.1. Clearance Versus Release

The terms "clearance" and "release" are very separate concepts that can be easily confused. Clearance refers to the process of review for releasability, and release refers to the actual dissemination of any

information to the public. Release includes any means of communication possible including speeches, papers given at symposia and conferences with public attendance, news releases, even letters.

13.9.2. The Security Review Process

Security review begins with the material being submitted to the cognizant Public Affairs Office (as per AFR 190-1.) The material is logged in, given a quick check by the reviewer, and (in most cases) is sent on to one or more appropriate staff agencies for comment.

After receiving any comments on the material, the reviewer either clears the material as is, clears the material with recommended changes, forwards the material for higher headquarters review (the PAO tries for clearance at the lowest possible level), or denies the clearance of the material. If denied, the reviewer is required to return the material to the originator with an explanation of why the clearance was not granted.

It is important to note that this process also applies to contractor materials (symposium papers, news releases, articles, advertising, films, scripts, and photos) generated under DoD or Air Force classified contracts. This requirement is placed on them through DD Form 254, Contract Security Classification Specification, and accepted by them at the time the contract is signed.

13.9.3. Relationship of the STINFO Program Manager to the PAO

All Statement A STINFO materials must be submitted to the Public Affairs office for security review prior to these materials being distributed. Therefore, this loop must be included in the local STINFO materials handling procedures. Also, in order to make your document processing system run as smoothly and quickly as possible, you should become familiar with Public Affairs processing requirements for these materials (forms necessary, number of copies, etc.).

Also, you should be aware that although the PAO tries for clearance at the lowest possible level, certain classes of information automatically require SAF/PAS and OASD/PA review, and will therefore take longer to process.

13.10. The Freedom of Information Act (FOIA)

13.10.1. Key Points

- The FOIA is the legal channel for public access to government records.
- AFR 12-30, "Air Force Freedom of Information Act Program" is the governing regulation.
- FOIA requests are processed by the FOIA monitor, the office of primary responsibility for the materials, and the Staff Judge Advocate.
- There are many exempt materials from FOIA release, including materials available from National Technical Information Service (NTIS) and the Government Printing Office (GPO).
- In the case of unclassified technical documents with military or space application and export controls which would have been denied FOIA release, qualified U.S. contractors may get access through certification, but this channel is not a FOIA request.
- The STINFO office has no direct responsibility in the FOIA process, but should assist the FOIA monitor as necessary in the processing of FOIA requests. There will be situations in which the STINFO office is the designated Office of Primary Responsibility for specific documents.

13.10.2. What the FOIA Is

Public access to information has long been an issue in the U.S. In 1966 Congress passed legislation, called the Freedom of Information Act to broaden public access to government records. This Act was amended in 1974 to remove obstacles that the bureaucracy erected since 1966, and amended again in 1984 to limit access to certain CIA records.

The 1966 act requires executive agencies to make records, reports, policy statements, and staff manuals available to citizens who request them, unless the materials fall into an exempt category. The exempt categories are:

1. Secret national security or foreign policy information.
2. Internal personnel practices.

3. Information exempted by law such as income tax returns.

4. Trade secrets, other confidential commercial or financial information.

5. Inter-agency or intra-agency memos.

6. Personal information, personnel, or medical files.

7. Law enforcement investigatory information.

8. Information related to reports on financial institutions.

9. Geological and geophysical information.

In 1974 Congress passed a large number of amendments to the FOIA, mainly to remove some of the common obstacles that citizens encountered in trying to get information through the original FOIA. Some of these amendments were:

1. Required federal agencies to publish indexes of final opinions on FOIA-requested materials, and to supply annual FOIA summary reports to Congress.

2. Required release in cases where the request contained only a description of the materials, as opposed to the exact title.

3. Required agencies to establish uniform fees and to publish them. (Most agencies waive fees under a certain dollar amount, usually around $30.)

4. Set up time limits for responding to requests.

5. Amended the wording of the security exemption to make it clear that it applies only to *properly* classified information.

13.10.3. Covered and Exempt Items Under FOIA

The only material covered by the FOIA are documents, not information. If the record does not exist as a document or file, it does not come under FOIA.

There are a number of exemptions from release under the FOIA.

1. If the publication is available from either NTIS or GPO, it is exempt from the FOIA. Note that this covers all Statement A technical documents, and a number of Air Force Manuals, etc.

2. If the publication contains contractor proprietary information. This covers documents containing trade secrets and commercial or financial information submitted by a person

outside the Air Force, and submitted with the understanding that it will be kept on a privileged or confidential basis. Included in this category are contractor cost and technical proposals.

3. Information from personnel and medical files.

4. All classified information.

5. Certain unclassified technical data which would be subject to export control, and with military or space application. However, "qualified U.S. contractors" may have access to this data once they have been certified. Requests made following this channel are not FOIA requests.

6. Pre-decisional information which contain advice, evaluations or recommendations, the disclosure of which would reveal the deliberative process of the Air Force.

7. Requests received from foreign governments. (These are forwarded to the Foreign Disclosure Policy Office for processing.)

13.10.4. Who is Responsible for FOIA Requests

The individuals and offices involved in the processing of FOIA requests are:

1. FOIA Managers, who serve as focal points for FOIA requests received by the organization and manage the FOIA program.

2. FOIA Monitors, who actually process the requests.

3. Office of Primary Responsibility, who have and control the information requested.

13.10.5. How FOIA Requests are Processed

The FOIA Manager receives and logs all FOIA requests, and passes the request on to the appropriate FOIA Monitor. If the request involved foreign disclosure, it is passed on to the Foreign Disclosure Policy Office.

The FOIA Monitor determines the Office of Primary Responsibility for the requested materials, and forwards the materials to that office.

The OPR locates the record (if not destroyed) and, working with the Staff Judge Advocate, determines whether or not the record should be released. The FOIA package (paperwork and materials), are completed by the OPR with the assistance of the FOIA Monitor, and forwarded back to the FOIA Manager.

The FOIA Manager sends the materials to the requester, collects fees, and prepares various reports.

13.10.6. Relationship of STINFO to FOIA

The STINFO office has no direct responsibility in the FOIA process, but should assist the FOIA monitor as necessary in the processing of FOIA requests. There will be situations in which the STINFO office is the designated Office of Primary Responsibility for specific documents requests.

13.10.7. Documentation

The major documents concerning FOIA to be aware of are:

1. AFR 80-34, "Withholding of Unclassified Technical Data from Public Disclosure"
2. AFR 12-30, "Air Force Freedom of Information Act Program"
3. DoD Directive 5230.25, "Withholding of Unclassified Technical Data from Public Disclosure" (Part of AFR 80-34)

13.11. Information Analysis Centers (IACs)

13.11.1. What an Information Analysis Center Is

An IAC collects, reviews digests, analyzes, appraises, summarizes and provides advisory and other user services concerning the available scientific and technical information in a well-defined, specialized field. IACs are distinguished from documentation centers and libraries in that these activities are primarily interested in the handling of documents rather than the technical content of documents. Also, the IAC operation involves subject specialists, as opposed to technical librarians, who for the most part, are not subject specialists.

13.11.2. How to Find IACs

A large number of formal (federally-funded and usually contractor-operated) and informal (locally-funded and usually in-house) IACs exist, and these vary widely in size and services. IACs can vary in size from small, one person operations on up to operations involving 30 people or so.

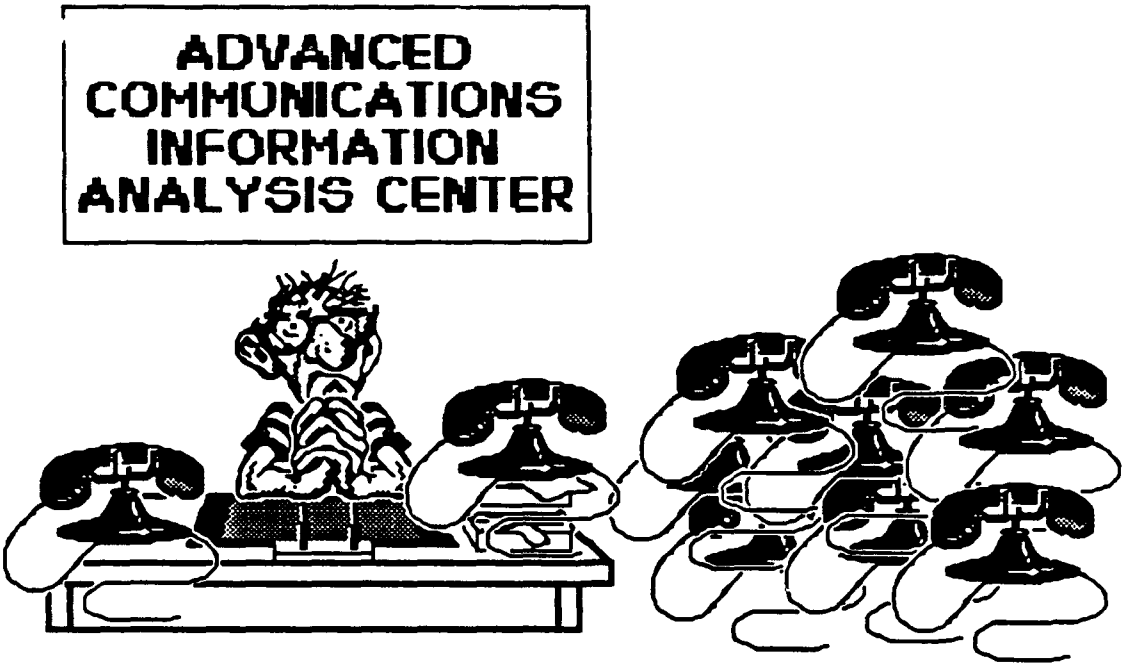
Some of the IACs are supported by DoD activities, but many are not. Of the DoD-supported IACs, about 20 or so are administered by DTIC, while others are locally-administered.

The best three finding aids for IACs are:

1. ***DoD Information Analysis Centers Directory***, a small pamphlet issued by DTIC covering those IACs administered by DTIC.

2. ***Directory of Federal Laboratory and Technology Resources, 1988-1989***, PB88-100011. Lists information about the more well-known IACs (as well as a lot of other information.)

3. ***Defense Technical Information Center (DTIC) Referral Data Bank Directory***. This a is miscellaneous database maintained by DTIC and issued in printed form (irregularly). The latest edition which I am aware of is AD-A138 400, published in 1984.



13.11.3. What IACs Exist at Air Force Sites

A quick check of the above directories yielded the following list of IACs located at Air Force sites. Because these lists tend to include the larger IACs, there could be a number of others in this category.

1. Aerospace Structures Information and Analysis Center (ASIAC), Wright-Patterson AFB.
2. Data and Analysis Center for Software (DACS), Rome Air Development Center, Griffiss AFB.
3. Reliability Analysis Center (RAC), Rome Air Development Center, Griffiss AFB.
4. Survivability/Vulnerability Information Analysis Center (SURVIAC), Wright-Patterson AFB.
5. Crew Systems/Ergonomics (recent), Wright-Patterson AFB.

13.11.4. What an Information Analysis Center Does

Each IAC is concerned with clearly-defined subject matter which may be either discipline oriented (covering a clearly-defined part of a technical discipline, an example being ASIAC) or mission oriented (requiring an interdisciplinary approach, an example being SURVIAC.)

The extent of the IACs services vary with their size, but all:

1. Gather information from the world's published and unpublished sources on the topic of interest.
2. Organize the relevant information into collections of materials and bibliographic databases, some of which are accessible through DTIC.
3. Evaluate the information collected. These evaluations take the form of comparisons, critical appraisals, state-of-the-art reports, and other summaries.
4. Answer specific questions concerning the technology and give referrals to individuals within the technology.
5. Provide custom bibliographic searches and other custom information-related services concerning the field.

13.11.5. STINFO Duties Regarding Any Local IAC

If you are at an activity that has an IAC, you should become familiar with their operation, and you have the specific duty to monitor it. Also, the IAC should be included in any STINFO inventory you make. Be aware that IACs both create new STINFO products and sponsor technical conferences, and these should be subject to the same procedures and controls as other STINFO products generated by your organization.

13.12. Staff Judge Advocate

There is no direct connection between the STINFO program and the Staff Judge Advocate's function. However, because the Staff Judge Advocate's office is responsible for the activity's legal needs in various situations, you will on occasion have interactions with this office.

There are two STINFO-related situations in which interaction with the Staff Judge Advocate's office will happen. First, it is the responsibility of this office to give advice and guidance on the release or denial of FOIA requests. Because the STINFO office will be called upon to help in processing FOIA requests, some interaction will occur in this context.

Also, the Staff Judge Advocate's office handles all patent-related issues (such as licensing) at your activity as well as any Cooperative R&D Agreements that are negotiated. Because these two functions relate directly to the technology transfer activity, some interaction will also occur in this context.

The Staff Judge Advocate's office will also become involved if you are faced with contractor rights statements, copyright questions, Qualified Contractor disqualifications, etc.

13.13. National Technical Information Service (NTIS)

National Technical Information Service
5285 Port Royal Road
Springfield, VA 22151
703-487-4600

13.13.1. What NTIS Is

While NTIS is a large and diverse organization, its primary function is to be the central source for the public sale of Government-sponsored research, development , and engineering reports, as well as foreign technical reports and other analyses prepared by national and local government agencies, their contractors, or by Special Technology Groups (another name for Information Analysis Centers). NTIS acts as (1) a repository for these materials, (2) an organizer of these materials, and (3) as a secondary distribution source for these materials.

The NTIS collection exceeds 1.5 million titles, about 300,000 of which contain foreign technology or marketing information. (While very large, the NTIS collection is less than half the size of the Library of Congress reports collection which contains about 3.5 million titles.)

WHEN YOU THINK OF NTIS

THINK OF
'UNCLASSIFIED, UNLIMITED,
SALES TO THE PUBLIC"

All titles are permanently on sale (there is no such thing as an out-of-print NTIS title), either directly from the 80,000 titles in shelf stock or from the microfiche masters of titles less in demand. About 70,000 new titles are

added to the collection each year, and each year NTIS ships about 6 million items.

NTIS sells its products and services under the provisions of Title 15 of the U.S. Code, which not only established such a clearinghouse, it directed it to be self-supporting. Therefore, the costs of doing business are paid for from sales income, not from congressional appropriations.

The main organizing tool for the NTIS collection is its Bibliographic Data File, which is available online from all of the major database vendors and is one of the most used S&T databases. By using this database, technical materials can be located by author, title, subject, and many other search points.

In addition to its role as a repository/distributor of technical reports, NTIS has a number of other programs that the STINFO Program Manager should be aware of. These include (1) an International Technology Acquisition Program whereby NTIS tries to "exchange" access to the NTIS collection for materials from another country; (2) a Center for the Utilization of Federal Technology (CUFT) which provide various services to improve industrial access to federal technology, (3) a Federal Research in Progress database (not generally contributed to by DoD). (4) the Communist media translations made by the Joint Publications Research Service, and (5) a Federal Software Exchange Center to exchange software between Federal agencies.

Because the purpose of CUFT is to link U.S. business with federal technology, its services and products are important. The major products and services of CUFT are (1) annual catalogs of Government patents and licensing arrangements, (2) the monthly *Tech Notes* publication and the corresponding annual index, and the annual *Directory of Federal Laboratory & Technology Resources*.

13.13.2. Relationship of the STINFO Program Manager to NTIS

There is no direct relationship between the AF STINFO program and NTIS. The STINFO Program Manager should be aware of what NTIS is, its services, and the fact that the STINFO Program Manager might be named as the contact point in the CUFT directory. In addition, in situations where the STINFO Program Manager is called upon to advise on access to a Statement A publication (such as in response to a FIOA request), you should be aware that NTIS is the public access point for these materials, not DTIC.

13.13.3. Discussion

All of the information stored by NTIS is unclassified/unlimited (Statement A - Approved for Public Release) and is accessible by anyone, including foreign nationals. All Statement A reports submitted to DTIC will be passed on to NTIS automatically for public sale. This fact should be kept in mind when assigning a distribution statement to a document.

The ***Directory of Federal Laboratory & Technology Resources*** is of high interest to the STINFO Program Manager because (1) it contains a listing for any laboratories within your organization, and (2) it contains a listing for the Federal IACs. The laboratory listing will contain a summary of the "expertise" for that laboratory, as well as a contact point who can be contacted directly by outside industry. This contact person is (I think) usually the same contact point for the Federal Laboratory Consortium.

The Federal IAC listing is an important resource because it lists all the Federally-funded IACs (including the DoD-sponsored IACs). (Identifying IACs has become more difficult because the National Referral Center of the Library of Congress has been the victim of a budget cut.)

You should keep in mind that there is a tremendous amount of overlap of the materials in NTIS and the collections of DoD, DOE, and NASA. In fact, if access to the publication is currently unlimited, NTIS should have a copy of it in its collection.

13.14. Small Business Innovation Research (SBIR) Program

The DoD SBIR Program is coordinated through:

Deputy Director
Office of Small and Disadvantaged Business Utilization
Room 2A 340, The Pentagon
Washington, DC 20301
(202) 697-9383

13.14.1. What the SBIR Is

In 1982 the Small Business Innovation Development Act was passed by Congress to stimulate U.S. productivity and economy through increased technological innovation. The Act provides for the federal government to use small businesses to meet its needs for technology. Originally the Act was to last for five years, ending in 1988. The Act has been extended for an additional period of five years and is now scheduled to end in 1993.

Beginning in FY 83, federal agencies with R&D budgets in excess of $100M per year began to allocate set percentages of these funds for SBIR programs. The opportunity to compete for these funds is in the form of a single, annual SBIR solicitation from the DoD. This solicitation and the solicitations from other agencies are coordinated by the Office of Innovation, Research and Technology, Small Business Administration, Washington, DC 20435, (202) 653-6458. This office also issues quarterly release schedules for all agency solicitations under this program.

13.14.2. How the SBIR Program Operates

Under the law, the SBIR program operates as a three-phase process.

PHASE I is based on proposals solicited by participating agencies. The DoD issues one Small Business Innovation Research solicitation each year. This solicitation is the vehicle through which the SBIR program thrusts of the DoD are announced. These solicitations contain topics on which small firms are invited to submit proposals. PHASE I winners are awarded average contracts of $50,000 to complete a six month effort.

PHASE II is the principal R&D effort with a duration of around two years. Most Phase II awards are between $200,000 and $500,000. Awards for Phase II work are based on the results of Phase I efforts and the scientific and technical merit of Phase II proposals.

PHASE III is conducted by the small business to pursue commercial application of the results of Phase II efforts. This Phase allows the business to pursue commercial applications of the work started in Phase I and II, and to seek non-Federal funding.

In FY 84 the DoD evaluated 3,007 proposals submitted under this program, of which 397 were actually funded for an average amount of $54,000. The total amount of Phase I contracts was slightly over $20 million dollars, an amount approximately equal to the total Phase II awards. The DoD contracts represents slightly under half the total U.S. program.

13.14.3. Relationship between the SBIR and DTIC

There is a special relationship between the SBIR program and DTIC because of the need of potential bidders to access DoD technical information. Basically, DTIC prepares a technical solicitation package for each topic in DoD's solicitation, and then provides these packages to small businesses which respond to these solicitations.

These technical support packages contain bibliographies of DoD-funded reports and summaries of R&D projects in progress. Referrals to IACs and other sources of technical information are also included in the package. Also, the small business may request any technical report mentioned in these bibliographies. (Prior to the actual receipt of a contract, these bidders are in a special DTIC category similar to if they were a potential contractor under the Potential Contractor Program.)

13.14.4. Relationship between the SBIR and STINFO

These is no direct connection between the SBIR and the STINFO office.

You should be aware, however, that in support of the SBIR, your organization contributes to the SBIR program solicitation. Bidders (or potential bidders) on SBIR solicitations can get access to unclassified, unlimited DTIC materials in a special potential user category, and this category is upgraded as the contracts are awarded.

Also, one of the outputs from an awarded SBIR effort will be STINFO materials, and these would be handled in the same way as other contractor-generated STINFO.

14. Giving a Presentation

14.1. Key Points

- Presentation skills are important.
- There is a "better" way to prepare for presentations
- Presentation skills can be improved.

14.2. Discussion

14.2.1. The Importance of Presentation Skills

One of the most important ways we have of informing people and persuading them on almost any topic is to give a direct, formal presentation. A well-done presentation is far more effective than any of the competing media such as.the phone, information sheets, and newsletters. Unfortunately, as we all know, a poor presentation can be damaging to our point and actually turn people away from our point of view.

There are two distinct parts to a presentation: (1) the preparation of the presentation, and (2) the giving of the presentation. My experience is that most people do a poor job of both parts, with the giving of the presentation getting the worst of the deal.

Giving a presentation is, according to David Wallechinsky's Book of Lists, the worst fear that people have, ahead of the fears of heights, death, and sickness. If you share this fear, just remember that you are not alone, and that the key to overcoming these fears is to believe in the importance of your topic and do a thorough job of preparing your presentation.

14.2.2. The Presentation Checklist

The no-fail, 9-step checklist to creating an effective presentation is:

1. **Define the objectives.** You must be able to clearly state to yourself what you want the audience to remember, to understand, to believe, or to act on.
2. **Design the presentation close.** The close will determine what the audience takes with them, and as such is the most important part of the presentation.

3. **Create the opening**. The opening should set the stage for the close.

4. **Organize the body**. Break down the major subjects into small enough chunks to be digested.

5. **Add interest items**. Interest items are the asides, examples, and jokes that you need to add every 10 minutes in your presentation.

6. **Design visual aids**. The combination of simple vugraphs and a flip chart are unbeatable.

7. **Tailor the presentation to the specific audience**. Whatever you do, don't give a canned presentation without tailoring it to the specific group you are facing.

8. **Create "cheat sheets"**. For every visual aid, you should have a paper copy containing a small version of the visual aid and a couple of key things that you want to say about that topic.

9. **Rehearse the presentation**.

14.2.3. The Objectives

The very first thing to work on in a presentation is a short list of the specific objectives of your presentation. Don't bypass this step by claiming that it is obvious why a particular presentation is being given. Write down the objectives and think about them. Are they your *real* objectives?

14.2.4. The Close

The close is the next thing to develop. What is the thought you want to leave in the listeners' ears when they leave the room?

One of the best closes to use is the close that summarizes the entire presentation and leaves a strong hint that the objectives, which are stated once more, have been met. When you are designing the close, concentrate on the objectives of the presentation.

14.2.5. The Opening

The opening in a presentation is always a setup for the close. If you are pressed for an appropriate opening, start by asking the cogent question that the presentatation is going to answer.

14.2.6. The Body

The body of the presentation is simply a breakdown of the points that you are planning to make. List these points and rearrange them into a logical order. Also, ask yourself if some points too small to be worth making at all. Since people will only remember a small fraction of your presentation anyway, you should include only the major points.

14.2.7. Visual Aids

Your visual aids should follow on the layout of the body of the presentation. For each point you are making in the body of the presentation, ask yourself if a visual aid would help make the point. Also, it is very common to leave a vugraph slide up while you are in transition to a new topic. If you do this, then think about what you want on the screen while you are talking.

14.2.8. Adding Interest

Having defined the objectives, designed the close and opening, outlined the body, and created the key visual aids, you have a presentation. Unfortunately, it will bore most people that you give it to. Artificial as it seems, you should deliberately go through the presentation and add an item of interest about every ten minutes.

These should not all be the same. Some items that you can mix in are short personal stories that relate to the topic. These topics should be mentioned in a casual manner, even though you know exactly what you're going to say and how you are going to say it. Another effective interest item are off-beat vugraphs that both make a point and make people laugh. Even in a very serious, professional briefing, it is OK to include a cartoon or a pithy saying or two.

14.2.9. Tailoring Your Presentation

If you find yourself in the position of being called on to give a "canned" presentation (even if you developed the presentation yourself), as a minimum, tailor the presentation to the expected audience. Think about who is going to hear it. Is there some particular slide or point that is irrelevant to this audience that should be taken out? Are there other "war stories" and human-interest items that should be added to form a bond with the audience?

14.2.10. Creating Cheat Sheets

About the worst thing you can have in front of you when you are giving a presentation is your talk, written out in detail. You will be tempted to read it, and if you stray from the text, you will get lost and then fumble around trying to regain your place and train of thought. If you are used to having your talk in front of you, take a chance and leave it in your office the next time you give a presentation. You'll never bring it along again.

The best thing that you can have in front of you are what are called "presentation masters." These are summary sheets (one per visual aid) that contain a reduced picture of the slide and the key words and thoughts that you plan to bring up when a particular visual aid is on the screen.

If you are using vugraphs, then a very clever way to use cheat sheets without anyone in the room being aware of it is to place your vugraphs in cardboard frames and write your comments on the edge of the vugraph. It is very natural to glance down at the vugraph while you are talking.

14.2.11. Rehearsing

It is only a very few rare individuals who can stand up in front of a group and think clearly for an extended period "on their feet." For most people, rehearsing what you are going to say is the best way.

Don't rehearse in front of others. Either rehearse in an empty room, or in front of a tape recorder.

14.2.12. PowerPoint

Software to prepare vugraphs has been around since computers first started to appear, and there are many packages available today on personal computers. One particular package, PowerPoint, is very special and goes way beyond vugraph preparation. This package, which has only been out since 1987, allows you to create and manage presentations, not just "make vugraphs". In fact, all of the vugraphs, handouts (reduced versions of the vugraphs that you will receive at the end of the course), and the "presentation masters" for this course were prepared using this software.

First, the bad news. PowerPoint is currently available on only the Apple Macintosh computers. Since the government (and probably your office) is highly IBM-compatible, you will have to search to get access to this package. Even if you only make a couple of presentations a year, it is worth the trouble to find a way to get access to this software: it's that good.

14.2.13. Tips

1. Don't read from any written document. Don't even think about it! Yes, follow a script or outline; yes, have cheat sheets, but never, never read a presentation. One of the reasons that conferences are so boring is that 95% of the presenters tend to read their paper verbatim. How many times have you ever seen a presenter step in front of the podium and give their talk without notes?

2. Speak much louder than you think you should, and if possible, without a mike.

3. Look at everyone in the audience at least once, especially those in the back row of the presentation.

4. Show and demonstrate as much as you can. If you are talking about a document, have a copy of the document near and hold it up as you are talking.

5. Take a deep breath and **smile** before you begin.

14.3. Reference

The very best reference on giving presentations is a recent paperback by David Peoples.

Presentations Plus: David Peoples' Proven Techniques, David A. Peoples, John Wiley & Sons, 1988.

15. Training STINFO Users and Generators and Promoting the STINFO Function

15.1. Key Points

- The STINFO Program Manager is responsible for conducting an indoctrination program for the users and generators of STINFO. This will require:
  - Preparing and distributing a STINFO Guidebook.
  - Developing and refining a STINFO presentation.
  - Giving a STINFO briefing as part of any new personnel orientation that is given for new engineers.
  - Giving ongoing STINFO training on a regular basis to all STINFO generators.
- The STINFO Program Manager is responsible for promoting the STINFO program at their activity. Some of the ways to promote the program that might be used are:
  - Issuing a local STINFO bulletin or newsletter.
  - Preparing and giving a "Command Brief" whenever possible and appropriate.

15.2. Conducting A Continuous Indoctrination Program for Users and Generators of STINFO

The STINFO Program Manager is responsible for conducting a continuous indoctrination program for both the users and generators of STINFO products. Three aspects of this indoctrination program might be (1) the preparation of a local STINFO guidebook, (2) orientation presentations to new employees, and (3) regular training sessions for generators of STINFO.

The key question for you to answer is:

How are the producers and users of STINFO finding out (1) what STINFO products and services are available, and (2) the requirements, standards, and procedures for generating STINFO products?

15.2.1. Preparing a Local STINFO Guidebook

A concise, useful STINFO Guidebook should be the cornerstone of your indoctrination program. It can be given out during all training and orientation sessions, and if well written, will save you time in the long run.

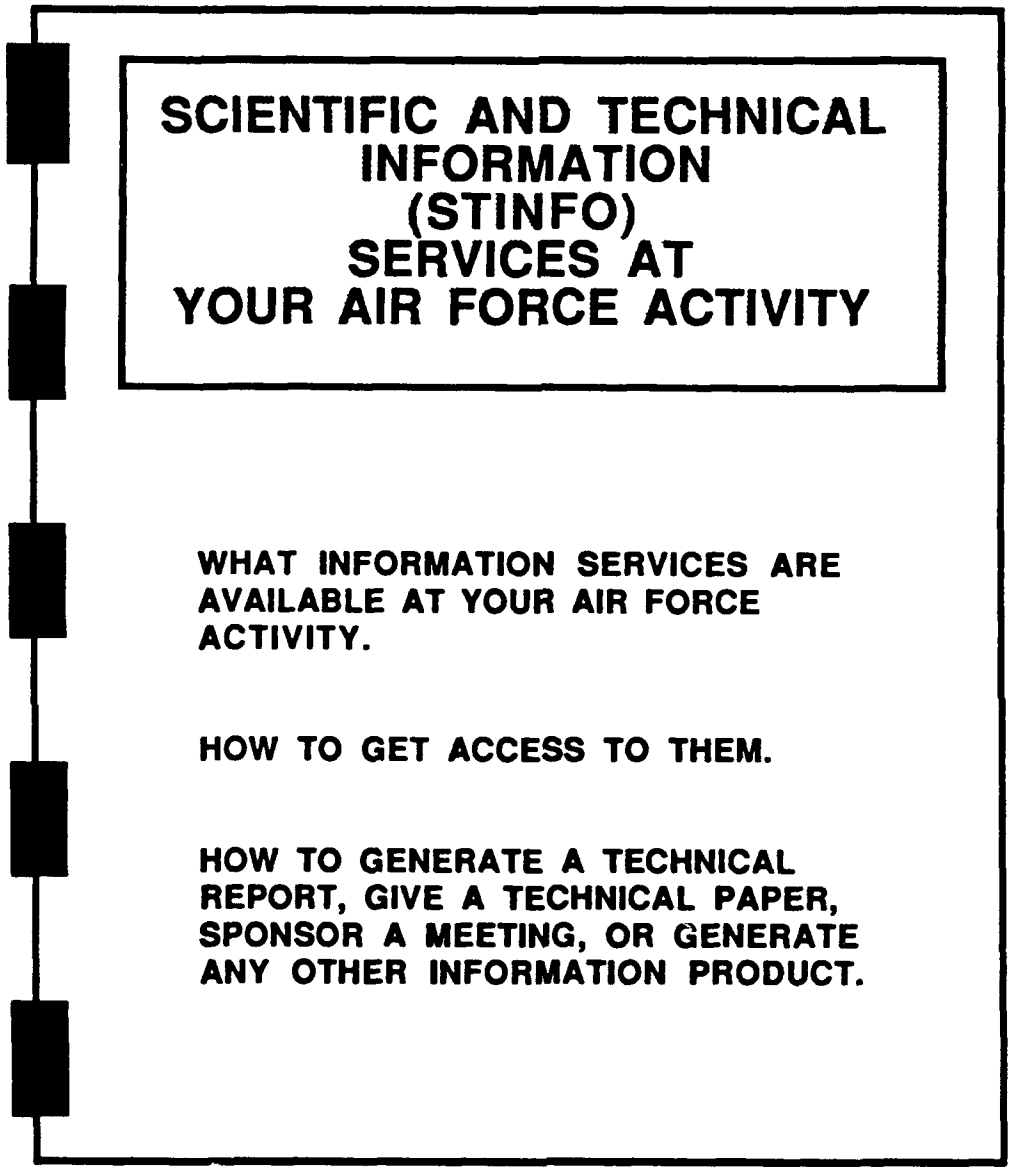
The two topics that should be addressed in this Guidebook are, as was mentioned above, (1) what STINFO products and services are available, and (2) the requirements, standards, and procedures for generating STINFO products.

If you want this guidebook to serve its purpose, some good advice to follow is:

1. **Make it short.** Unless it is your job, no one has time for long and wordy guidebooks (such as these notes). The shorter it is, the more likely it is to be used.

2. **Make it accurate and current.** Engineers and scientists are constantly pressed to keep up to date, use the latest technology, etc., and are almost trained to ignore documents that are obviously out of date. If you want your guidebook to be used, keep it current! As new services become available, be sure that they are included. And, as report processing procedures become streamlined to reflect modern technology, be sure that these updated procedures are also included.

3. **Have it contain a series of "How to ..." pages.** One of the best formats to use in a guidebook are are series of pages, each starting with "How to ..." and containing a list of steps to carry out the action.



STINFO GUIDEBOOK COVER

15.2.2. Orientation Presentations

One of the obvious places to inject indoctrination is as part of whatever new employee orientation conducted at your activity. You should prepare a very short presentation (trying to make four or five key points at most), give away your guidebook, and make sure that each engineer and scientist knows how to get access to whatever STINFO services are available at your location.

Because new employee orientations tend to be a blur (do you remember yours?), you should not try and make it a training session. Just try for awareness that (1) there are procedures to follow when generating STINFO, and (2) there are STINFO services available to support new and ongoing projects. If you can make even these two points solidly, you'll be doing well.

15.2.3. Local STINFO Training

Every generator or user of STINFO should, at some point, be given some training. However, a major problem is how to get a busy engineer to take time out to attend such a training session. The approach of having a complete multi-hour training session at the STINFO site is simply not a very strong drawing card. Two alternatives to consider are (1) a series of short, very specific topic sessions that are announced and given, and (2) taking the training directly to the specific offices that need it.

15.3. Promotion of the STINFO Function

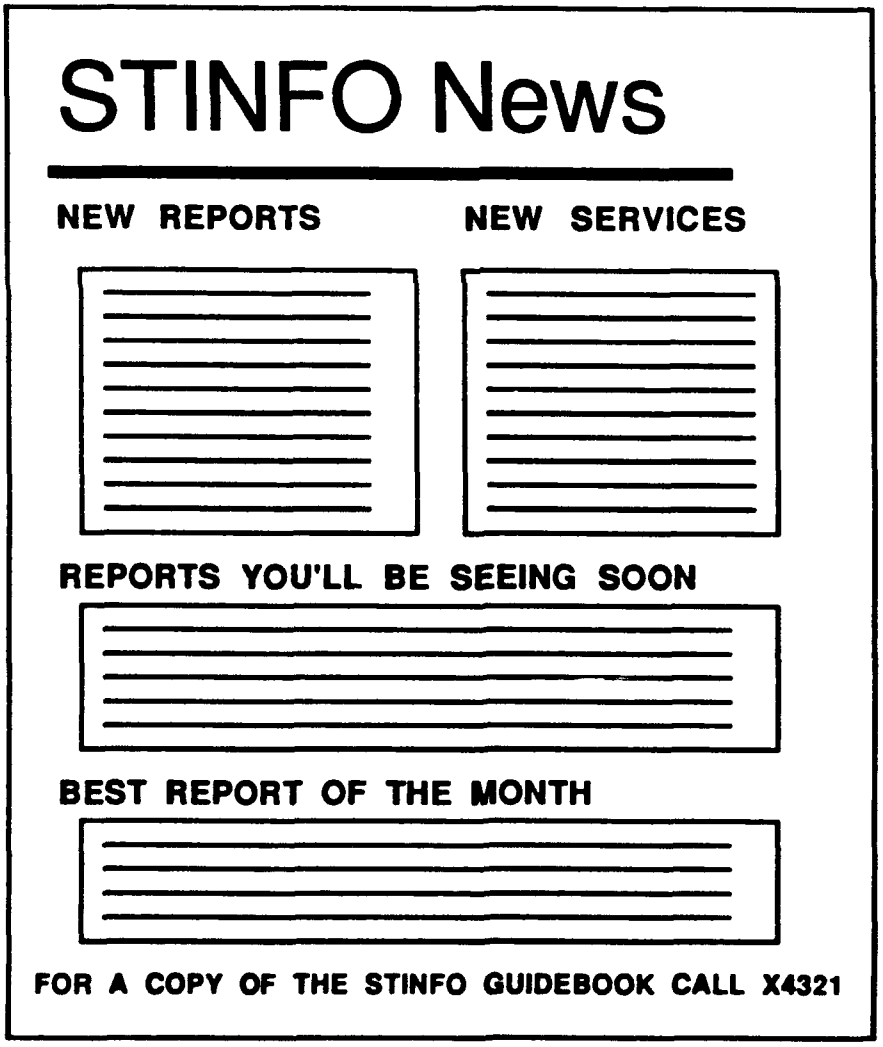
The best promotions that the STINFO function can have are your doing your job in an effective, efficient manner; your training sessions; and the STINFO Guidebook. However, two other promotional items to consider are a regular STINFO newsletter and command briefings.

15.3.1. A Local STINFO Newsletter

Issuing a newsletter to STINFO users and producers can be an effective promotional and information tool And, if you don't get carried away by either excessive content or professional format, a short one-page or two-page newsletter is not difficult to put together.

Such a newsletter could contain information such as a listing of all STINFO titles recently issued, all titles in process, the "best report of the month," new services, and reminders of existing services and how to get access to them.

One of the keys to newsletters is not to issue them too often. If you do, they become a burden to produce and won't contain enough new material to be worth reading. However, a regular newsletter produced at a wide interval such as every two months is better than an irregularly produced newsletter. Irregular newsletters tend to get more and more irregular as time goes on until they fade into the sunset, whereas the self-imposed deadline of getting out a regular publication tends to keep a newsletter going.



15.3.2. Command Brief

A "canned" Command Briefing about STINFO services should also be prepared and used to promote your program. However, the preparation of such a briefing package is worthless unless it is given. Such a briefing can always be announced and given independently, but if given as part of another set of briefings, you will reach a larger audience. You should actively seek out opportunities to give your briefing at appropriate occasions as part of your STINFO promotional program.

16. PC Applications in STINFO

I have included this section for two main reasons. First, even the most cursory knowledge of today's microcomputers should convince anyone that having a micro would be a tremendous asset for carrying out the STINFO Program Manager's duties. And second, not one of the STINFO offices that was contacted while preparing this course had a microcomputer in sight.

16.1. Key Points

- Having a PC and the requisite skills to use it would be a tremendous asset for the STINFO Program Manager.
- Some of the areas in which a PC could be used are:
  - Tracking STINFO through the use of a STINFO materials database.
  - Maintaining a list of the SDI profiles for DTIC.
  - The preparation of presentation materials.
  - General correspondence.
  - Direct access to DTIC and other database vendors.
- PC software has evolved to where you need a good reason not to be using it.

16.2. Today's Important Hardware Technologies

It is hard to believe that IBM entered the personal computer market just a few years ago in 1981. The rate at which these information tools have transitioned from being interesting technological toys to being essential to our lives and work is truly mind-boggling.

There are many important hardware technologies associated with the microcomputer revolution. However, from the STINFO Program Manager's perspective, four technologies stand out. These are the ubiquitous IBM-compatibles, the Apple Macintosh, the laser printer, and the introduction of CD-ROM disks for database distribution.

These four technologies will impact the STINFO function!

16.2.1. IBM Compatible Micros

The dominate personal computer in the DoD (by far) are the many, many IBM-compatible PCs such as the Zenith 248, Compac 286, etc. All of these computers are based on the original IBM PC design that was introduced in 1980. They are the types of microcomputers that most of the engineers and scientists at your installation will have on their desks, and will have been used to prepare their technical publications.

This class of microcomputer has some important advantages and disadvantages that you should be aware of. Some of the advantages are:

1. They are cheap and readily available.
2. There has developed a large body of "native intelligence" about their use. If you need help, the odds are that someone in an office close to you will be able to assist you.
3. There is a very large installed base for this technology and the requisite software.

Some of the disadvantages of this technology are:

1. It is about as friendly and easy to learn as driving a Sherman Tank.
2. It is currently not close to being "state-of-the-art."

16.2.2. The Apple Macintosh

The Apple Macintosh was introduced in 1984, and is currently the microcomputer best suited to the STINFO function. Originally plagued by a lack of software and a "Yuppie Toy" image, the Macintosh has matured to the point that it is the computer of choice by anyone who hasn't had an IBM compatible thrust upon them

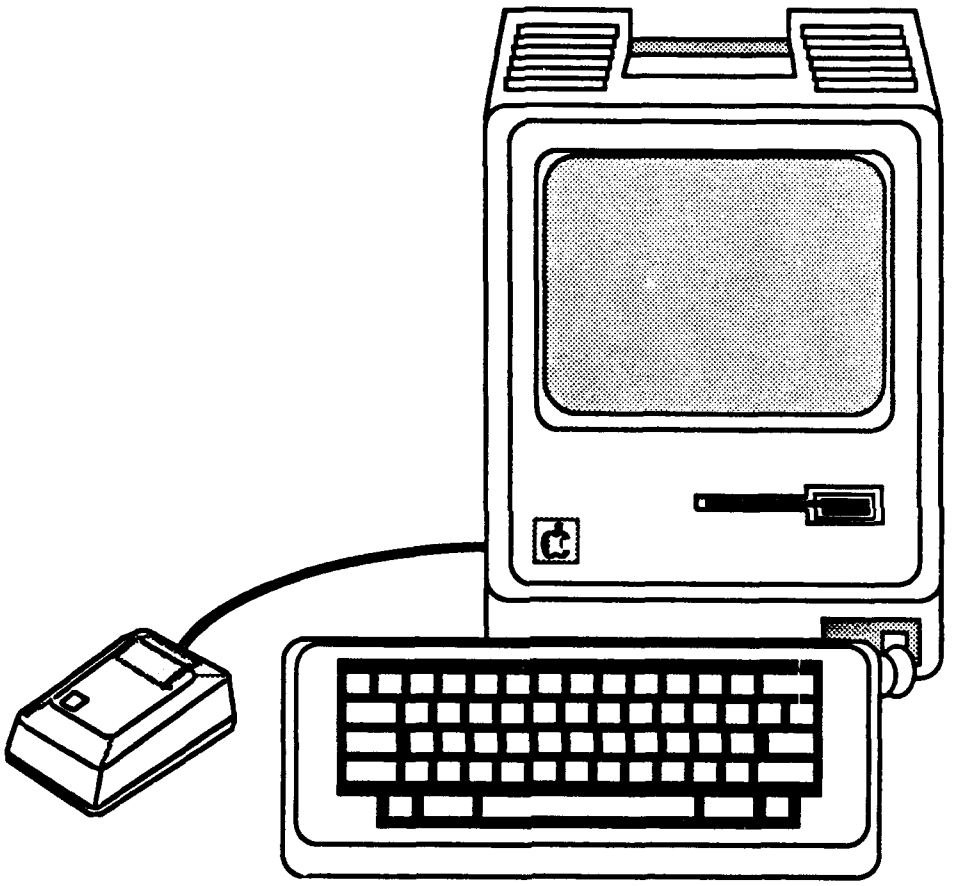
The advantages of this microcomputer are:

1. It is simple to use.
2. It provides a consistent interface between software packages so that a minimal amount of re-training is required to switch between different software packages.
3. Its high-resolution screen gives you "What-You-See-Is-What-You-Get" capability and is ideally suited to publication generation.

The disadvantages of this microcomputer are:

1. It is more expensive than the IBM-compatible microcomputers.

2. It has a much smaller installed base than the IBM compatibles.



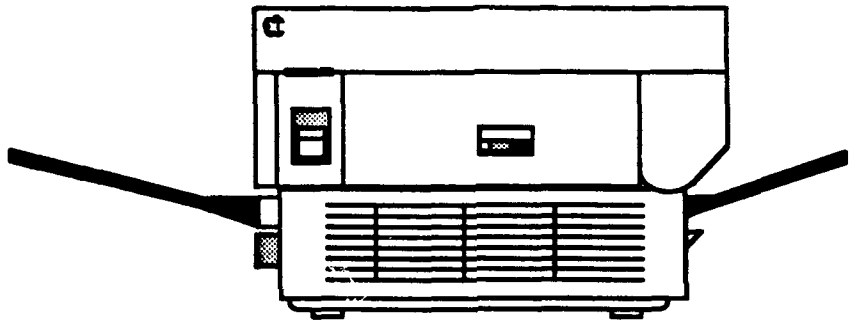
16.2.3. Laser Printers

The introduction of low-cost laser printers has had a dramatic impact on the production of publications. It is now not only possible but commonplace to produce camera-ready documents directly without ever having produced a "rough-draft." It is important to realize that these laser printers are (1) pushing other printer technologies off the market, and (2) are basically just dot-devices with very high resolutions.

When low-cost laser printers were first introduced by Hewlett-Packard and Apple Computer, they cost between $3500 and $7000. In the

last year a number of very-low cost models have come on the market and currently you can buy a laser printer for around $1200. To put this number in perspective, a dot-matrix printer capable of high quality output costs around $600.

Laser printers are just dot-devices with very high resolutions. Today's lowest resolution laser printers have a resolution of 300 dpi (dots per inch), meaning that in a solid black square inch there are 90,000 dots. While this resolution is adequate for almost all STINFO needs (this notebook and all accompanying materials were produced on a 300 dpi laser printer), you should be aware that much higher resolutions are also available. Resolutions of 600 dpi, 1200 dpi, and 2400 dpi are currently on the market, and if the prices keep falling, in the near future we will all have phototypeset-quality output devices beside our desks.



16.2.4. CD-ROM

The introduction of CD-ROM as an information storage device and for the distribution of databases is still in its infancy, but will have a tremendous impact on the future of STINFO.

A CD-ROM is a prerecorded, nonerasable data disk manufactured with the very same technology used to press CD-ROM recordings of music. The aspects of this technology that are so important are (1) the tremendous amount of information that a CD-ROM disk can hold, and (2) the cheap cost of manufacture and distribution of the silver disks.

CD-ROMs hold at least 550 megabytes of digital data, enough room for about 150,000 pages of text. And, in addition to just text, you can easily mix graphics, sound, and even animation on a disk.

To put this in perspective, it is interesting to note how many CD-ROMs it would take to hold the entire DTIC collection of materials (**full-text**). Averaging the page lengths from about 50 random reports out of the TRAC yielded 60 as a good estimate. Since there are on the order of 1.5 million reports in the DTIC collection, some simple math results in the

surprising result that 2500 reports can be held on one disk, and the entire collection can be held in 600 disks.

A similar calculation for the abstracts and indexes to this collection (equivalent to the TR database) yields the result of 10 or fewer CD-ROMs to hold this information.

Yes, there is the problem of updates (which usually require replacement of the last disk in a collection), but it should be obvious to you that within a short period of time, database access functions will become distributed (as opposed to the centralized situation we have today) wherein libraries will have collections of CD-ROMs to peruse, and every engineer and scientist will have direct online access to the major bibliographic abstracts and indexes.

16.3. The Uses of Today's Personal Computers (The Desktop World)

Today's personal computers have many applications. These applications fall into the standard applications which have been around for a while (such as word processing), and more sophisticated applications that have picked up the "desktop" prefix. Some examples of these are desktop publishing, desktop presentations, desktop library access, and desktop video production. (In essence, the "desktop" metaphor means to be able to perform these functions start-to-finish by yourself and while sitting at your desk.)

16.3.1. Standard Applications

Today's personal computers seem to be everywhere and are used for everything you can imagine. However, three standard applications of PCs are still (1) word processing, (2) spreadsheet applications, and (3) database management.

The use of a PC for word processing has become universally accepted - almost to the point where anyone using the traditional alternatives of a typewriter or handwriting is suspected of being a heretic and a historical curiosity. The advantages of using a PC for word processing are many and the disadvantages are few.

A spreadsheet is nothing but an electronic piece of paper, and because paper is so useful, the electronic version of it is even more so. Because a spreadsheet consists of just words, numbers, and the results of calculations on the numbers, they can be used in many diverse applications. In addition to just the computational applications of spreadsheets, today's spreadsheets are useful to maintain small databases and produce graphical summaries of information.

The third fundamental PC application is for database management. A database is just a collection of information, an example being the Rolodex on your desk. The basic database operations are (1) designing the database, (2) entering and editing records, (3) putting the records into some desired order, (4) searching to identify records that meet some criteria, and (5) generating some report based on information in the database.

It is as a database management tool that the PC will have the greatest use in a STINFO office.

16.3.2. Desktop Publishing

The desktop publishing phenomenon started with the introduction of the Apple Macintosh and Laserwriter. With these two tools, anyone with a small amount of money and skill could (and many people do) produce publications at home. An additional tool that has been added recently is the low-cost laser scanner. This tool allows a person to easily add photographs and scanned images to a publication, treating the printed world as "clip art."

The introduction of page layout programs has fueled the desktop publishing application even more. These programs, which replace the traditional layout tools of waxer and scissors, allow a user to place page elements, flow text, etc., and bypass all manual page layout steps.

16.3.3. Desktop Presentations

The graphics capabilities of PCs has led to the introduction of packages specifically designed to help produce presentation materials. The premier package in this area is currently PowerPoint, the package used to make the vu-graphs used in this workshop.

These packages allow you to design slides, add text and graphical elements, and rearrange the slides into whatever order you wish. In addition, by projecting the screen image from the monitor, you can easily bypass the entire slide production step. (The slides really don't ever have to exist physically, just as magnetic media.)

16.3.4. Desktop Library Access

The combination of a personal computer, a modem, and a few passwords has turned many desktops into very powerful libraries. With the advent of CD-ROM as a distribution device, this is becoming even more so.

With there now being well over 3000 commercially available databases, and with the introduction of CD-ROM, the use of a library to

archive and maintain large collections of paper reference materials is being challenged.

16.3.5. Desktop Video Production

A lesser technology from the standpoint of STINFO, but one which will be making a solid impact in the future is desktop video production. With the introduction of frame capture boards (which allow video pictures to be captured in real time), video animation and titling software, and genlock hardware, it has now become feasible for anyone with minimal skills to produce quality videos by themselves.

In the near future you will be seeing more and more videotapes being produced as STINFO products.

16.4. STINFO Applications for a PC

Given that the introduction of personal computers is a good thing with a variety of uses, the real question is, "What specifically could a PC be used for in a STINFO office?" Clearly, in a job as demanding and varied as the STINFO Program Manager's is, any productivity multiplier will be welcomed, and that is what today's PC technology gives to you.

The five obvious areas in which a PC would help out are (1) general correspondence and document preparation, (2) tracking of STINFO materials, (3) maintenance of SDI profiles for projects/individuals, (4) preparation of presentation materials, and (5) communications and database access.

16.4.1. General Correspondence and Document Preparation

It almost goes without saying that for a function as paper-intensive and communication-intensive as a STINFO office, the introduction of a PC for general correspondence and document preparation is a necessity.

16.4.2. Tracking System

Unless you have a very small number of STINFO products to track, the use of a PC to track this information is very desirable. The actual software used to implement this function is not very important, since any spreadsheet or database management program could be used for this tracking system. Once set up, the various output reports, searches, and calculated performance measures would be relatively painless.

16.4.3. Maintenance of SDI Profiles

The SDI capability of DTIC and other database vendors is very powerful and it is one of your responsibilities to see that this capability is put to use at your activity. The drawback of this capability is maintenance of the profiles. Once setup, the interest profiles are static until manually changed. But, project and individual interests change over time. Because these changes tend to be gradual, people will let their interest profiles slowly drift out of date until they are totally useless and pass directly from the mail to the wastebasket.

The maintenance of these user interest profiles can be made much easier by collecting them together in a database. Aside from the convenience of having them together in one place, reports can easily be generated to indicate which profiles haven't been changed in a while, etc.

16.4.4 Preparation of Presentation Materials

While only a small portion of a STINFO Program Manager's time will be spent preparing presentation materials, quality presentation materials are important to being able to communicate your message and convince people that you "have your act together."

16.4.5. Communications and Database Access

Direct access to DTIC and other database vendors can of course be done using a simple terminal. Again however, the convenience of using a PC for this application makes any other device obsolete. The fundamental thing that a PC can do that a terminal cannot do is download information - basically capturing anything that comes down the phone line. Almost always this downloading is for the purpose of subsequent manipulation of the information using a word processor.

The USAF STINFO Program Manager

Training Course

Appendix: Regulations and Forms

Prepared by:
Charlie Maiorana
INFO/tek

Appendix: STINFO Documentation

This Appendix contains a set of the governing regulations, support regulations, miscellaneous documents, and forms that the STINFO Program Manager should have at their desks. Although this set is as current as possible, you should be aware that many of the items included here are in the process of being updated.

The numbers in the following list refer to the section tabs. Following this list is a brief description of each item. Also starting on page 9 is a short bibliography of the other documents that were either mentioned in the notes or were discussed during the workshop.

Governing Regulations

1. AFR 83-1: The USAF Scientific and Technical Information Program
2. AFR 83-2: AF Technical Report Program
3. AFR 80-44: Defense Technical Information Center
4. AFR 80-43: Sponsoring or Cosponsoring and Conducting Scientific and Technical Meetings

Document Marking Regulations

5. AFR 80-45: Distribution Statements on Technical Documents (includes DoD Directive 5230.24 as an Attachment)
6. AFR 80-34: Withholding of Unclassified Technical Data from Public Disclosure (includes DoD Directive 5230.25 as an Attachment, see also DoD 5230.25-PH below)
7. AFP 80-30: Marking Documents with Export Control and Distribution Limitation

Supporting Documents

8. DoD 3200.12: DoD Scientific and Technical Information Program
9. AFR 80-12: Research and Technology Work Unit Information System Regulation (Includes DoD 3200.12R1: R&T Work Unit Information System Regulation)
10. DLAM 4185.16: Certification and Registration for Access to DoD STINFO (Until AFR 80-39 is updated, use this document.)

11. DoD 3200.12-R4: Domestic Technology Transfer Program Regulation
12. AFR 80-11: Air Force Information for Industry Offices
13. AFSC 80-37: Air Force Technical Objective Document Program
14. DoD 5200.12: Policy on the Conduct of Meetings Involving Access to Classified Information
15. DoD Instruction 5230.27: Presentation of DoD-Related Scientific and Technical Papers at Meetings
16. DoD 5230.25-PH: Control of Unclassified Technical Data With Military or Space Application

Forms

17. DD Form 1540: Registration for Scientific and Technical Information Services
18. DD Form 1541: Facility Clearance Register
19. SF 298: Report Documentation Page
20. Sample Notice Page (Used at AFWAL)
21. DTIC Form 50: DTIC Accession Notice
22. DTIC Form 55: Request for Limited Document
23. FL Form 88: Request for Scientific and Technical Reports
24. DD Form 1423: Contract Data Requirements List (CDRL)
25. DD Form 2345: Militarily Critical Technical Data Agreement
26. DD Form 843: Requisition For Printing and Binding Service
27. Sample Data Item Description

Governing Regulations

1. AFR 83-1: The USAF Scientific and Technical Information Program

This regulation describes the Air Force Scientific and Technical Information program, explains how it is organized, how it is to be conducted, and how STINFO resources are to be managed to reach STINFO goals. It is the single most important regulation for the STINFO Program Manager to be aware of since it includes policies, procedures, administrative practices, and management guidance that pertain to the USAF STINFO program.

2. AFR Reg 83-2: Air Force Technical Report Program

This regulation covers the rules for writing, processing, distributing, and publishing technical reports generated either in-house, or under contract, subcontract, or grant.

3. AFR 80-43: Sponsoring or Cosponsoring and Conducting Scientific and Technical Meetings

This regulation sets forth the Air Force policy on sponsoring or cosponsoring scientific and technical meetings. It provides procedures for Air Force participation in meetings, states who may authorize attendance, and explains publication and distribution of meeting proceedings.

This regulation does not cover meetings attended only by Government employees or U.S. military personal, nor does it cover the presentation of Air Force-related papers at meetings not sponsored by the Air Force.

4. AFR 80-44: Defense Technical Information Center

This regulation establishes policy, assigns responsibility, and prescribes procedures for Air Force support of DTIC. The major sections of this regulation state that Air Force activities (1) must submit Work Unit Information Summaries to DTIC and (2) must promote the information exchange with DTIC by sending STINFO to DTIC and by requiring the project scientist or engineer to use the WUIS and other DTIC resources in order to preclude duplication of effort and ensure current awareness of similar or related efforts.

Document Marking Regulations

5. AFR 80-45: Distribution Statements on Technical Documents (Includes DoD Directive 5230.24)

This regulation establishes policies and procedures for marking technical documents to show whether the document is releasable to the public or that the distribution must be controlled.

6. AFR 80-34: Withholding of Unclassified Technical Data from Public Disclosure (Includes DoD Directive 5230.25)

This regulation establishes policies and procedures for disseminating or withholding unclassified technical data. Basically, any unclassified data that may not be exported lawfully without an approval, authorization, or license under the export-control law should be withheld from public distribution.

7. AFP 80-30: Marking Documents with Export Control and Distribution Limitation

This pamphlet is meant to be used with AFR 80-45 and AFR 80-34 to assist in identifying export-controlled data, and to provide rationales for picking the appropriate distribution limitation statement.

Support Documents

8. DoD 3200.12: DoD Scientific and Technical Information Program

This Directive defines the overall concepts and assigns responsibilities for the operation and management of the DoD STIP. In addition, this Directive outlines the mission and functions of the Defense Technical Information Center (DTIC).

9. AFR 80-12: Research and Technology Work Unit Information System Regulation (Includes DoD 3200.12R1: R&T Work Unit Information System Regulation)

This regulation describes the Work Unit Information System: a system for reporting technical and management data of ongoing work at the work unit level within the Research, Development, Test and Evaluation (RDT&E) Program. Basically, it assigns responsibility, states what should be reported, and states when and how this information should be transmitted to DTIC.

10. DLA Reg 4185.16: Certification and Registration for Access to DoD STINFO (Until AFR 80-39 is updated, use this document)

This manual describes procedures by which eligible organizations register for access to DoD STINFO through the Defense Technical Information Center. It details all the forms and procedures necessary to access the different levels and types of data available.

11. DoD 3200.12-R4: Domestic Technology Transfer Program Regulation

This Regulation establishes the DoD Domestic Technology Transfer Program in response to both the Stevenson-Wydler Technology Innovation Act of 1980 and Public Law 96-480. In essence, it sets up an Office of Research and Technology Applications (ORTA) at each DoD R&D activity and lists the duties of these offices. These duties include coordinated support of both the Federal Laboratory Consortium (FLC) for Technology Transfer and the Center for the Utilization of Federal Technology (CUFT).

12. AFR 80-11: Air Force Information for Industry Offices

This regulation establishes the Air Force Information for Industry Offices, provides policy guidance, and assigns responsibilities for the dissemination of information to and from the AFIFIOs. As a STINFO Program Manager, your primary responsibility in this area is to ensure that all releasable planning (and similar) documentation gets distributed to the three AFIFIOs.

13. AFSC 80-37: Air Force Technical Objective Document Program

This regulation is just for the use of the Aerospace Medical Division, Arnold Engineering Development Center, and all AFSC Laboratories. It states the purpose of the Technical Objective Documents, and assigns responsibilities for their preparation and distribution.

14. DoD 5200.12: Policy on the Conduct of Meetings Involving Access to Classified Information

This Directive specifies the DoD policies, procedures, and responsibilities for sponsoring and conducting meetings involving access to U.S. classified data.

15. DoD Instruction 5230.27: Presentation of DoD-Related Scientific and Technical Papers at Meetings

This Instruction amplifies the information presented in DoD 5200.12. In particular, it provides guidance concerning unclassified export-controlled information.

16. DoD 5230.25-PH: Control of Unclassified Technical Data With Military or Space Application

This pamphlet is a clear, concise guide to the meaning and implementation of DoD 5230-25 and DoD 5230-24. As such, it should be stockpiled and distributed freely to all STINFO generators and users.

Forms

17. DD Form 1540: Registration for Scientific and Technical Information Services

This form is submitted to DTIC in order to register for DTIC services. In addition to determining the duration of the registration, this form also determines what subjects the requestor will have access to in the case of classified materials. The Subject Fields of Interest part of this form corresponds to the subjects listed in the *Subject Categorization Guide for Defense Science and Technology*, which is an upgrade of the COSATI subject category list.

18. DD Form 1541: Facility Clearance Register

This form is submitted to DTIC by any facility which plans to request classified materials from DTIC. In order to receive classified materials, the facility must have been cleared up to the level of the requested materials.

19. SF 298: Report Documentation Page

This form, which is filled in by the report author, is used by DTIC for input to the technical reports database. It is the STINFO Program Manager's responsibility to ensure that the report author has sufficient guidance for filling in the form, and that each form is reviewed prior to submission to DTIC. It is also the STINFO Program Manager's responsibility to see that it is submitted with the report to DTIC.

20. Sample Notice Page

A Notice Page is a review and approval statement for a technical report, and is usually placed on the inside front cover of the document. The sample included here is that used by AFWAL.

21. DTIC Form 50: DTIC Accession Notice

This form is submitted to DTIC along with a technical report. Once the report has been processed, the completed form is sent back to the submitting office to notify them of the AD number assigned to the report.

22. DTIC Form 55: Request for Limited Document

This form is used when ordering limited distribution technical reports. These reports are recognized by the "L" suffix to the AD number. The completed form is sent by the requestor directly to DTIC. After validation at DTIC, it is sent on to the controlling office for that report for release determination. It is the responsibility of the STINFO office to have in place a system to receive, log in, distribute for decision, track, and return this form.

23. FL Form 88: Request for Scientific and Technical Reports

This form is used by DTIC to request information about documents which it has become aware of, but which it doesn't have in its collection yet. Ensuring that these forms are processed is part of the STINFO Program Manager's responsibility.

24. DD Form 1423: Contract Data Requirements List (CDRL)

This form is used whenever data is required to be delivered under a contract. It is a physical part of the contractual agreement. It is completed by whoever is responsible for the data requirements of the contract, and is processed by the contracting officer. Its primary importance is that it identifies STINFO which will be generated in the future, and specifies when the STINFO will delivered and who within the Air Force will be receiving it.

25. DD Form 2345: Militarily Critical Technical Data Agreement

This form is submitted to the Defense Logistics Service Center by companies desiring access to export-controlled technical data. Acceptance places the company on the Qualified Contractor List for a renewable five year period, and allows the company to receive any export-controlled document that the company would have been able to receive otherwise.

26. DD Form 843: Requisition For Printing and Binding Service

This form is used when sending a document to a printing activity, and when receiving it back.

27. Sample Data Item Description

Data Item Descriptions (DIDs) are documents referred to on the Contract Data Requirements List (CDRL) to specify the format and other specification information about items purchased by the Department of Defense. For example, the DID included in this notebook is for Technical Publications, and specifies that the document format shall be in accordance with ANSI Z39.18. Thus, by accepting the contract, the contractor has committed to complying with this specification.

Other Documents Relating to STINFO

You should be either aware of or familiar with all of the following items. All of these items are discussed within the workshop notes.

1. ***Acquisition Management Systems and Data Requirements Control List (AMSDL).*** DoD 5010.12-L. The official listing of all DIDs that have been cleared for contractual use.
2. ***Air Force Information For Industry Office.*** Pamphlet describing the services provided by the three AFIFIOs and the procedures to access this information.
3. ***Air Force Potential Contractors Program.*** Pamphlet describing the AFPCP in detail. Available from the AFIFIO offices.
4. ***Code of Federal Regulations.*** A codification of the general and permanent rules published in the Federal Register by the Executive departments and agencies of the Federal Government. The Code is divided into 50 titles, and each title is further divided into Chapters for each Department associated with that title. Each Chapter is divided further into Parts covering specific regulatory areas. The Parts of the CFR that are of greatest interest to a STINFO Program Manager are those containing the Commodity Control List (15 CFR Part 399), International Traffic In Arms Regulation (22 CFR Part 120), and the U.S. Munitions List (22 CFR Part 121).
5. ***Defense RDT&E Online System Dial-Up Retrieval Self-Training Manual.*** DLAM 4185.18. October, 1986. Reference manual used by all DROLS searchers.
6. ***Directory of DoD Engineering Data Repositories (Military Handbook).*** MIL-HDBK-331C. This is a listing of all Engineering Data Repositories within the DoD. As of this issue, there were eight such Repositories associated with the Air Force. These repositories are "resting places" for engineering data once the project office (or other generator of this data) no longer has immediate need for it.
7. ***Directory of Federal Laboratory and Technology Resources.*** PB88-100011. Center for the Utilization of Federal Technology, NTIS. This directory lists all Federal Laboratories and their Technology Transfer Offices, as well as other important information relating to Technology Transfer.
8. ***Directory of Federal & State Business Assistance*** - This directory contains information about 180 Federal and 400 State business assistance programs, including technology transfer offices.
9. ***Directory of Online Databases.*** Quarterly. Cuadra/Elsevier, 52 Vanderbilt Avenue, New York, NY 10017. $110 per year. This is the best of the many commercial database directories that are currently available.

10. ***DoD Directives System Annual Index.*** DoD 5025.1-I. Washington Headquarters Services. This is a listing of all DoD Directives. It can be used to determine the latest issue of a particular directive, or all the directives that relate to a particular topic.

11. ***DTIC Retrieval and Indexing Terminology.*** AD-A176 000. DTIC. This is the authoritative listing of subject terms used to index STINFO in the various DTIC databases. It should be referred to by whoever assigns subject terms in Block 14 of the Report Documentation Page, and should be used in checking to see that this information is correct. It is also used extensively when constructing search strategies for use with DROLS.

12. ***Federal & State Contacts Involved with the Transfer of Federal Laboratory Technology.*** Center for the Utilization of Federal Technology, NTIS. This is a companion volume to the ***Directory of Federal Laboratory and Technology Resources*** . It lists the individuals and organizations involved in Technology Transfer.

13. ***Federal Technology Catalog.*** PB87-125688/BBD (Annual, this is the number for the 1986 edition.) NTIS. This contains summaries of all the "Tech Notes" type publications issued throughout the Government.

14. ***FOIA Processing Procedures.*** ASDP 12-3. February, 1987. Pamphlet describing the way FOIA requests are processed within the Aeronautical Systems Division (AFSC).

15. ***Scientific and Technical Reports: Organization, Preparation, and Production.*** ANSI Z39.18. This is the current format standard for the preparation of technical reports.

16. ***Users Guide to DTIC Programs, Products, Services (Handbook for Users).*** Pamphlet describing all aspects of DTIC's operation.

17. ***Independent Research and Development Contributing Organizations.*** DTICH 4185.5. December, 1983. DLA. This pamphlet lists all of the contractors participating in the IR&D program.

18. ***Independent Research and Development Users Manual.*** DLAM 4185.11. August 1981. DTIC. This manual describes the IR&D database from a user's perspective.

19. ***Industrial Security Manual for Safeguarding Classified Material.*** DoD 5220.22-M. September, 1987. This document provides uniform security guidance for all defense contractors and subcontractors having access to classified materials.

20. ***Industrial Security Regulation.*** DoD 5220.22-R. December, 1985. This document prescribes uniform procedures for the safeguarding and protection of classified materials.

21. ***Information Analysis Centers Directory.*** March, 1988. Pamphlet issued by DTIC describing those Information Analysis Centers under DTIC's administration.

22. ***Militarily Critical Technologies List (The)*** AD-A146 998. Office of the Under Secretary of Defense, Research and Engineering. This is an unclassified list of the keystone equipment, materials, and goods either explicitly in the Commodity Control List or the United States Munitions List, or being considered for inclusion on these lists. Note that there is a classified companion volume containing the rationale for a technology being included on this list.

23. ***Small Business Guide to Federal R&D Funding Opportunities.*** Prepared for the National Science Foundation by Foresight Science and Technology, Inc. March, 1986. PB86-100112. Contained a detailed description of the Small Business Innovation Research (SBIR) Program

24. ***Technical Reports Awareness Circular (TRAC).*** Monthly. DTIC. This is the paper announcement document for reports entered into the DTIC system during the previous reporting period. It is unclassified and contains no abstracts.

25. ***How To Get It A Guide to Defense-Related Information Resources.*** AD-A201 600. 1989. DTIC. This very popular and absolutely essential report lists, for each type of DoD document (old and new), what it is, who originates it, its cost, any restrictions, and where it is indexed.

This work prepared by

Charlie Maiorana
INFO/tek
4318 Fessenden St. NW
Washington, DC 20016